



Standard Guide for European Union's Registration, Evaluation, and Authorization of Chemicals (REACH) Supply Chain Information Exchange¹

This standard is issued under the fixed designation F 2725; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide will assist companies that manufacture, buy, or sell, or both, substances, preparations, and articles to ensure that supply chains comply with the European Union's Registration, Evaluation, and Authorization of Chemicals (REACH) regulation. This is accomplished by identifying the specific information elements that must be specified, requested and exchanged in communication between actors in the supply chain.

1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

F 2576 Terminology Relating to Declarable Substances in Materials

2.2 European Union Directives and Regulations:³

67/548/EEC Directive on Dangerous Substances
1999/45/EC Dangerous Preparations Directive
2006/121/EC Amending Directive 67/548/EEC Regulation (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

2.3 REACH Guidance Standards:³

Annex 1: Automotive Industry Guidance
Annex 2: Aerospace Industry Guidance

Annex 3: European Engineering Industries (Orgalime) Guidance

Annex 4: Fragrance Industry Guidance

Annex 5: Semiconductor Industry Guidance

Annex 14: List of Substances Subject to Authorisation

REACH Title II Registration of Substances

REACH Title IV Information in the Supply Chain

2.4 *REACH Implementation Project (RIP) Guidance Documents:*³

Annex 6: RIP 3.4 Guidance on Data Sharing

Annex 7: RIP 3.5 Guidance for Downstream Users

Annex 8: RIP 3.8 Guidance on Requirements for Articles

Annex 9: EU Commission publication: REACH-in-Brief

Annex 17: List of Restricted Substances and Conditions of Restriction

3. Terminology

3.1 Definitions:

3.1.1 Terms and definitions related to declarable substances in materials may be found in Terminology **F 2576**.

3.1.2 Terms and definitions in this guide not found in Terminology **F 2576** may be found in a common dictionary or other reference documents such as the *ASTM Dictionary of Engineering Science & Technology*.⁴

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *actors in the supply chain, n*—all manufacturers, importers, or downstream users in a supply chain.

3.2.2 *article, n*—object that during production is given a special shape, surface, or design that determines its function to a greater degree than does its chemical composition.

3.2.3 *candidate list, n*—list of substances that are subject to appear on **Annex 14** (authorization) list of substances and will someday require an authorization application for use.

3.2.4 *chemical safety report (CSR), n*—findings of a chemical safety assessment that shall consider the hazards and risks of a substances that is manufactured or imported in quantities greater than 10 metric tonnes per year.

3.2.5 *community, n*—27-member states of the European Union.

⁴ Available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428-2959, ASTM Stock Number: DEF00.

¹ This guide is under the jurisdiction of ASTM Committee F40 on Declarable Substances in Materials and is the direct responsibility of Subcommittee F40.02 on Management Practices and Guides.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from ec.europa.eu or www.echa.eu.

3.2.6 *downstream user, n*—any natural or legal person established within the European Community, other than the manufacturer or the importer, who uses a substance, either on its own or in a preparation, in the course of his or her industrial or professional activities.

3.2.6.1 *Discussion*—A distributor or a consumer is not a downstream user. A re-importer exempted pursuant to REACH Article 2 (7)(c) in Directive 2006/121/EC shall be regarded as a downstream user.

3.2.7 *exposure scenario, n*—set of conditions, including operational conditions and risk management measures, that describes how the substance is manufactured or used during its lifecycle and how the manufacturer or importer controls, or recommends downstream users to control exposures of humans and the environment.

3.2.7.1 *Discussion*—These exposure scenarios may cover one specific process or use or several process or uses as appropriate.

3.2.8 *import, v*—physical introduction into the customs territory of the community.

3.2.9 *importer, n*—any natural or legal person established within the community who is responsible for the import.

3.2.10 *intermediate, n*—substance that is manufactured for and consumed in or used for chemical processing to be transformed into another substance.

3.2.11 *manufacturer, n*—any natural or legal person established within the community who manufactures a substance within the community.

3.2.12 *manufacturing, v*—production or extraction of substances in the natural state.

3.2.13 *mixture, n*—combination or solution of two or more substances that do not react.

3.2.14 *only representative, n*—third party who may serve as importer of record on behalf of natural or legal persons established outside of the community (see *preparation*).

3.2.15 *per year, n*—per calendar year, unless stated otherwise, for phase-in substances that have been imported or manufactured for at least three consecutive years; quantities per year shall be calculated on the basis of the average production or import volumes for the three preceding calendar years.

3.2.16 *phase-in substance, n*—substance that meets at least one of the following criteria: (1) it is listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) and (2) it is manufactured in the community, or in the countries acceding to the European Union on January 1995 or 1 May 2004, but not placed on the market by the manufacturer or importer at least once in the 15 years before the entry into force of the REACH regulation, provided the manufacturer or importer has documentary evidence of this.

3.2.17 *placing on the market, v*—supplying or making available, whether in return for payment or free of charge, to a third party.

3.2.17.1 *Discussion*—Import shall be deemed to be placing on the market.

3.2.18 *preparation, n*—mixture or solution composed of two or more substances; preparations can contain several substances; they are not the same as multiconstituent sub-

stances; the difference between preparation and multiconstituent substance is that a preparation is gained by blending of two or more substances without any chemical reaction occurring, whereas a multiconstituent substance is the result of a chemical reaction; examples of preparations include paints, varnishes, and inks.

3.2.18.1 *Discussion*—REACH obligations apply individually to each of those substances depending on whether within the scope of REACH. Within the GHS, a preparation is known as a “mixture.”

3.2.19 *producer of an article, n*—any natural or legal person who makes or assembles an article in the community.

3.2.20 *restriction, n*—any condition for a prohibition of the manufacture, use, or placing on the market.

3.2.21 *safety data sheet, n*—hazard and risk information required by community law to be passed on from supplier to customer for dangerous substances and dangerous substances in mixtures above a certain concentration.

3.2.22 *substance, n*—chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent that may be separated without affecting the stability of the substance or changing its composition.

3.2.23 *use, n*—any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transferring from one container to another, mixing, production of an article, or any other utilization.

3.3 Acronyms:

3.3.1 *CAS*—Chemical Abstracts Service

3.3.2 *ECHA*—European Chemicals Agency

3.3.3 *EINECS*—European Inventory of Existing Commercial Chemical Substances

3.3.4 *ELINCS*—European List of Notified Chemical Substances

3.3.5 *ELV*—End-of-Life Vehicles Directive

3.3.6 *EPA*—Environmental Protection Agency

3.3.7 *EU*—European Union

3.3.8 *GHS*—Globally Harmonized System of Classification and Labeling of Chemicals

3.3.9 *IMDS*—International Materials Data System

3.3.10 *REACH*—Registration, Evaluation, and Authorization of Chemicals

3.3.11 *RIP*—REACH Implementation Project—technical guidance documents published by EU RoHS Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

3.3.12 *SIEF*—Substance Information Exchange Forum

3.3.13 *SVHC*—substances of very high concern

4. Summary of Guide

NOTE 1—This guide does not provide assistance on the legal requirements of REACH such as registration, evaluation, authorization, and restrictions. For a basic introduction to REACH and guidance for assessing your legal obligations under the regulation, please consult the documentation in Annex 9. For actual text of REACH, see: http://reach.jrc.it/legislation_en.htm.

4.1 What is REACH?

4.1.1 **Regulation (EC) No. 1907/2006** of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). REACH replaces 40 existing legal acts and creates a single system for all chemical substances.

4.1.1.1 *Registration*—Registration requires producers and importers to obtain and submit relevant information on chemical substances produced in or imported to the EU market in quantities greater than 1 tonne per year.

4.1.1.2 *Evaluation*—Evaluation allows the regulatory authorities to decide on proposals for further testing and assess whether dossier information provided by industry complies with the requirements.

4.1.1.3 *Authorization*—Authorization may be required for SVHC (carcinogens; mutagens; reproductive toxins; substances toxic, persistent, and bioaccumulative; substances very persistent and very bioaccumulative; and substances giving rise to equivalent concern).

4.1.1.4 *Restriction*—The safety net of the system; any substance on its own, in a preparation or in an article may be subject to community-wide restrictions if its use poses unacceptable risks to human health or the environment.

4.1.2 *Who Are the Actors in the Supply Chain?*

4.1.2.1 Manufacturers and importers of substances and preparations are obliged to register substances they produce or import in quantities greater than 1 tonne per year. Importers and producers of articles are required to register substances imported or produced in amounts greater than 1 tonne per year that are intentionally released from the articles. Failure to register means that the substance cannot be manufactured, imported, or used in the EU market.

4.1.2.2 Downstream users of chemicals shall apply the risk management measures for dangerous substances identified on the supplier safety data sheets. They shall also ensure that any substances they use in quantities greater than 1 tonne per year, which are manufactured or imported in quantities greater than 10 tonnes per year, are supported by a chemical safety report (CSR).

4.1.2.3 Other actors in the supply chain include distributors, retailers, and storage providers, all of whom are not classified as downstream users.

4.1.2.4 Consumers are not considered actors in the supply chain, but have certain rights under REACH, including the right to receive information about the presence of SVHC's in quantities >0.1 % in articles.

4.2 *Why Must REACH Information be Exchanged in Supply Chains?*

4.2.1 **REACH Title IV**, Information in the Supply Chain, specifically Articles 31 through 34, legally requires manufacturers and their supply chains to exchange certain information. Information exchange both upstream and downstream in the supply chain is also the only way to acquire the information necessary to meet many other requirements of the REACH regulation. Therefore, supply chain communication is both a legal requirement and a necessary activity ancillary to complying with other aspects of REACH.

4.2.1.1 Because of the often complex nature of global supply chains, a legal requirement falling upon an EU-based

importer, manufacturer, or downstream user will often have both a downstream and upstream ripple effect that will extend beyond the EU and will require support from the entire supply chain. Therefore, companies based outside the EU, for example, in the United States, with no direct business in Europe, will be drawn into the supply chain information exchange process to support their customers' requirements to provide information. All global companies may find it helpful to map out their location within supply chains to determine if any substances, preparations, or articles are imported into, exported out of, or manufactured in the EU and, hence, at risk of being impacted by REACH.

4.2.2 **Fig. 1** illustrates how REACH has the potential to impact all but the most isolated supply chains. Your company need not sell product in, or buy products from, the EU to be impacted, either directly or indirectly.

4.2.3 **Fig. 2** depicts an example of “selling into a supply chain that imports into the EU.” Note that there is no direct sale to an EU importer in this scenario, but that you sell to Customer A, who sells to the EU-based Customer D. Customer D's need for data will be cascaded down to you via the intermediary, Customer A. For example, Customer D may ask Customer A to identify the substance content of a preparation or article. Customer A may turn to you as having knowledge of this composition. Note that it is conceivable that you will need to turn to your own supplier(s) to obtain the chemical composition. Additionally, Customer D may need to describe their application to Customer A, who then may desire to provide related handling or toxicity information or both if available to help Customer D's registration process.

4.2.4 Similarly, **Fig. 3** depicts an example of “purchasing out of a supply chain that exports from the EU.” In this scenario, you buy from U.S.-based Supplier D, who formulates a preparation or article from Substances A and B and Preparation C. The substances in Preparation C are provided from an EU-based exporter. Any of a number of potential issues could result in an impact, including the following scenarios:

4.2.4.1 Should any of the substances in Preparation C be incorporated into the EU's candidate for authorization list, Preparation C (and hence Preparation/Article D) may no longer be available, or at least be subject to substantially increased costs.

4.2.4.2 The cost of registration may exceed Supplier C's desire to continue producing Preparation C.

4.2.4.3 Supplier C may choose to substitute substances/preparations used in Preparation C and may or may not tell Supplier D, who may or may not be able to pass this information along.

4.2.5 To avert surprise supply changes or price increases or both, proactively mapping out the supply chain and making a determination about the reliability of Preparation/Article D's supply is highly recommended. Note that this effort may be complicated by the fact that you have no direct contractual relationship with Supplier C and may therefore need to coordinate the investigation via Supplier D to address confidentiality and other concerns adequately.

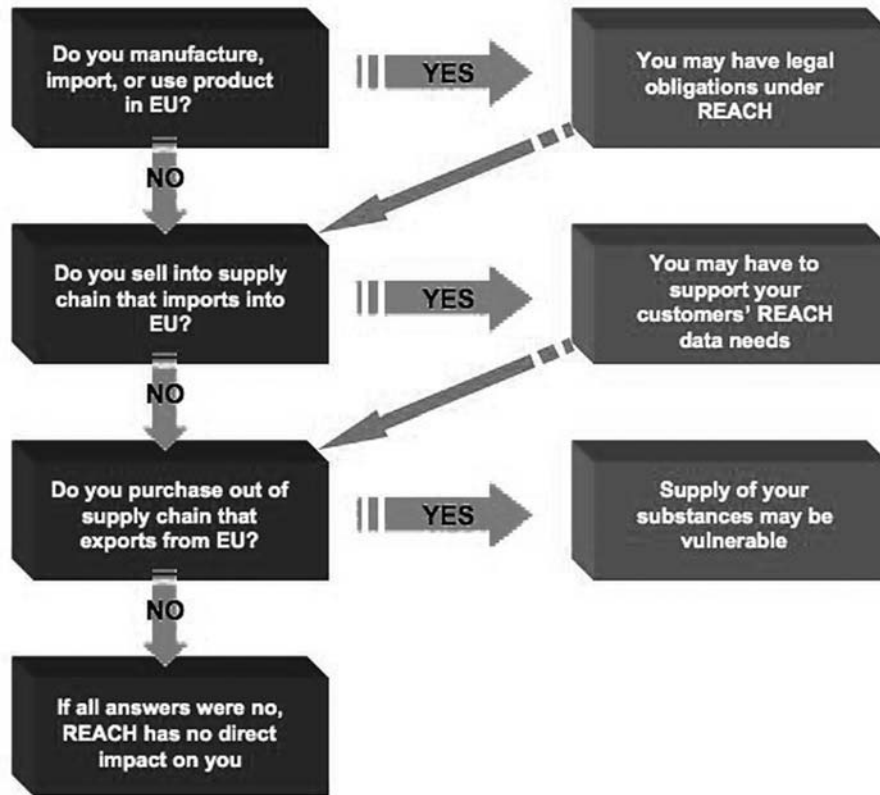
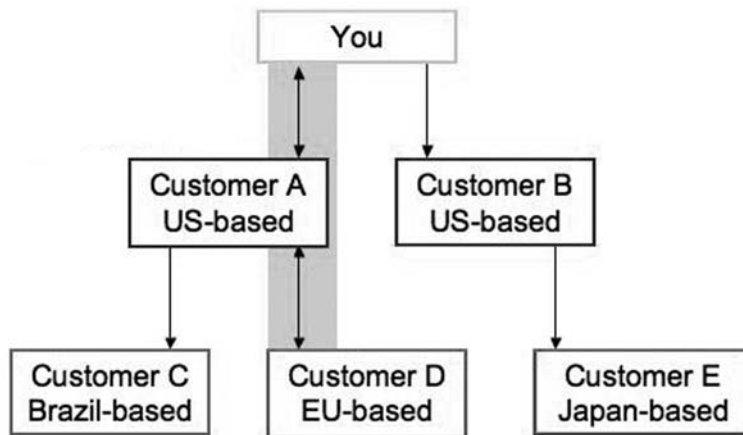


FIG. 1 Determining Your REACH Obligations



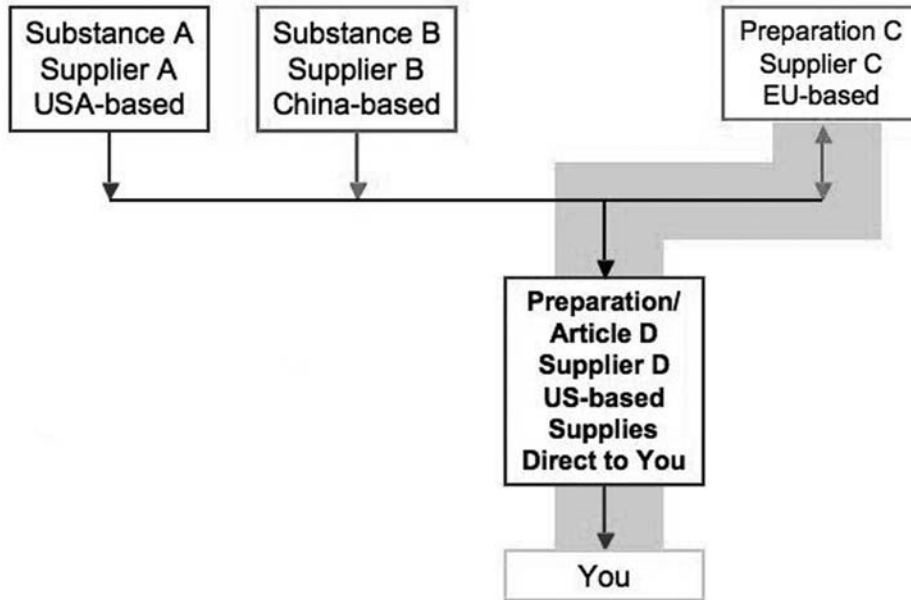
NOTE—Customer D requirements will be cascaded down to you via tier one supplier (Customer A)

FIG. 2 Example of Selling into a Supply Chain that Imports into EU

5. Significance and Use

5.1 This guide recommends practices and solutions for global supply chain information exchange for substances, preparations, and articles as identified by REACH. The first five annexes of REACH guidance standards serve as a central repository for REACH industry guidance that spans industry sectors and facilitates collaboration across complex global supply chains. Annexes 6-9 provide key EU guidance on information exchange in the supply chain.

5.2 Section 6 outlines the information that is to be exchanged in the supply chain both in the upstream and downstream directions. Fig. 4 provides a schematic depicting data flow in the upstream and downstream directions. A list of the elements to be included in this exchange is represented in Tables 1-5 that capture the necessary data fields for information exchange. Case studies 1-3 in Annex A1-Annex A3 provide three sample scenarios wherein a customer and supplier



NOTE—You have a potentially vulnerable material, since Material C is supplied by an EU-based supplier. You will want to know about substances in Material C and whether they are on the Candidate List. You may have to work via Supplier D who has the direct contractual relationship with Supplier C.

FIG. 3 Example of Purchasing out of Supply Chain that Exports from EU

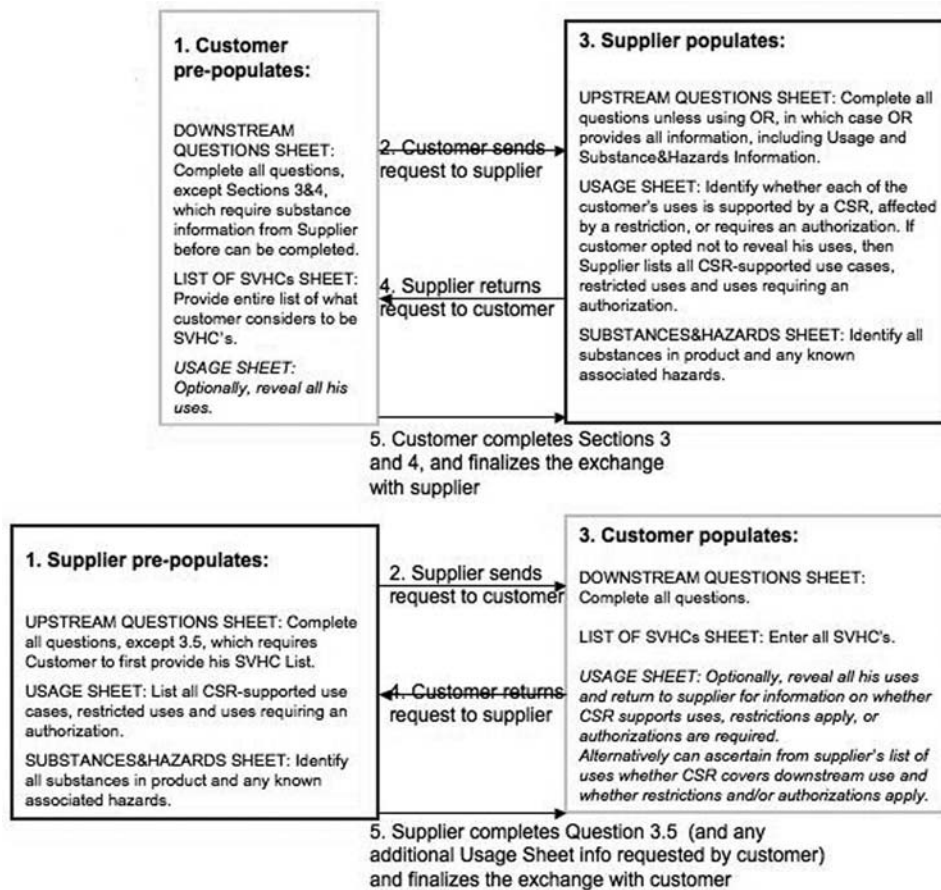


FIG. 4 Data Flow Pathway for F40 Supply Chain Communications

complete these five tables to exchange data to address their REACH compliance issues.

**TABLE 1 UPSTREAM QUESTIONS: Information Request–Upstream Direction,
Supplier would populate for Customer**

0.	Data	Required or Optional?	Expected Response/Comments
1. Company Information - Supplier	1.1	Company Name	Required Name of supplier/manufacturer.
	1.2	Company ID #	Required Supplier/Vendor ID #
	1.3	Mailing Address	Required Physical post-office mailing address of company.
	1.4	REACH Responsible Individual Name	Required Name of person whom all REACH communications go to.
	1.5	Contact Phone #	Required Phone number of this person.
	1.6	Contact Fax #	Required Fax number of this person.
	1.7	Contact Email	Required Email address of this person.
2. Product Information	2.1	Product Name	Required Common trade name.
	2.2	Supplier's Part/Material #	Required Supplier's internal part/material #. May be same as customer's part/material #.
	2.3	Is product a Substance, Preparation or Article?	Required See REACH definitions.
	2.4	If it is an Article, what is Article's weight (kg)?	Optional, provide justification if omitted Preferably this information is exchanged as customer will need to roll-up substance info and divide by article weight to determine 0.1% threshold for SVHC's.
	2.5	Are you a Manufacturer or Importer of Product in EU?	Required See REACH definitions.
	2.6	Are you a Downstream User of Product in EU?	Required See REACH definitions.
3. Substance Information NOTE: Must iterate through Section 3 for EACH SUBSTANCE IN PRODUCT	3.1	Substance Name	Optional, provide justification if omitted Preferably official IUPAC name, but see RIP 3.10 for substance naming conventions.
	3.2	CAS number	Optional, provide justification if omitted May not be applicable, as per RIP 3.10, CAS numbers do not always correspond to unique substances.
	3.3	EC Number (EINECS, ELINCS or NLP)	Optional, provide justification if omitted See http://ecb.jrc.it/esis/ for #'s.
	3.4	Do you know of any company who will register this substance?	Optional, provide justification if omitted Will rarely be available in early stages of REACH.
	3.5	Is it an SVHC, per the list we reference—see "LIST OF SVHC's" Sheet	Required. Requestor should reference his own list, i.e. aerospace, automotive, EU candidate list, JIG list, or customized list.
	3.6	Is it a phase-in-substance?	Optional, provide justification if omitted Does it already exist on the market, per REACH definition of "existing substance"?
	3.7	If in Preparation or Article, what is wt/wt concentration (%) ?	Optional, provide justification if omitted Should be supplied at least for all substances >0.1% concentration.
	3.8	If in Article, is it intentionally released?	Required See REACH definitions.
	3.9	What is Classification and Labeling category?	Required See Articles 4 and 6 of 67/548/EEC for categories; also, see ECHA-published Article 112 Classification and Labeling Inventory, when it becomes available.
	3.10	Do you plan to register substance?	Required If not, should state reason why not.
	3.11	Do you plan to pre-register substance?	Required If not, should state reason why not.
	3.12	Envisaged tonnage band/ registration deadline	Required 1-10 t, 10-100 t, 100-1000 t, >1000 t.
	3.13	Are there any restricted uses for the substance? If so, do any prohibit requestor's (customer's) uses per "USAGE" Sheet ?	Required Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (customer) can specify uses on "USAGE" Sheet , Column C. Responder (supplier) can then answer whether each individual use is restricted in Column E. Alternatively, supplier can list all restricted uses in Column H, and customer can then ascertain whether his uses are restricted per Annex 17 . Keep in mind restrictions apply to particular substances rather than whole products.

TABLE 1 *Continued*

0.	Data	Required or Optional?	Expected Response/Comments	
	3.14	Has an authorization application been filed for use of substance in this product? If so, does it cover requestor's (customer's) uses per "USAGE" Sheet ?	Required Supplier should inform customer, if and when an authorization is sought. Requestor (customer) can specify uses on "USAGE" Sheet , Column C. Responder (supplier) can then answer whether each individual use has been applied for in Column F. Alternatively, supplier can list all authorization applications in Column I, and customer can then ascertain whether his uses will be applied for, or whether he must complete his own application for his use(s). Keep in mind authorizations apply to particular substances rather than whole products.	
	3.15	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List. For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	
	3.16	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Supplier may have useful information to contribute either directly to customer or as a third party data holder for the entire SIEF.
	3.17	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required	Include exemptions from registration, evaluation, restriction, authorization, communication, etc...and any exemptions from the entire scope of REACH.
	3.18	Do you possess any hazard or toxicity data, or both, including basic physico-chemical properties of the substance? Unless this has been provided in an SDS or CSR, or both, please indicate possession of such data by placing a "Y" in appropriate column of "SUBSTANCES & HAZARDS" Sheet .	Required, if supplier possesses any such data. Any such data is likely to be in a lengthy report or study format and should be delivered separately from the information in this form.	The requirements of Section 3.18 can be fully met with a SDS or CSR, or both. If either of these have been communicated, Upstream Question 3.18's answer can simply reference those documents. However, since SDS's are not required for articles or for products purchased outside of EU, and CSR's are not required for substances manufactured/imported <10 tonnes/yr, hazards data will need to be communicated via this question for many products.
4. Business Information - Supplier	4.1	Will you continue to supply this product?	Required If not, should specify when production will cease.	
	4.2	Will your CSR cover my uses of your Product? See "USAGE" Sheet .	Response required (although covering such uses is not legally required, so answer can be "NO"). Requestor (customer) can specify uses on "USAGE" Sheet , Column C. Responder (supplier) can then answer whether each individual use is supported in Column D. Alternatively, supplier can list all uses supported in Column G, and customer can then ascertain whether his uses are encompassed in Column G.	
5. Only Rep Information	5.1	Registrant Name	Required if answer to 3.4 is YES Registrant will be required to provide registration number to its customers	
	5.2	Registrant Physical Address	Required if answer to 3.4 is YES Registrant will be required to provide registration number to its customers	
	5.3	Registrant Contact Individual	Required if answer to 3.4 is YES Registrant will be required to provide registration number to its customers	
	5.4	Registrant Phone #	Required if answer to 3.4 is YES Registrant will be required to provide registration number to its customers	
	5.5	Registrant Email	Required if answer to 3.4 is YES Registrant will be required to provide registration number to its customers	
	5.6	Is this Registrant your Only Representative?	Required if answer to 3.4 is YES Only Rep will be required to provide registration number to its customers	

**TABLE 2 DOWNSTREAM QUESTIONS: Information Request–Downstream Direction,
Customer would populate for Supplier**

0.	Data	Required or Optional?	Expected Response/Comments	
1. Company Information - Customer	1.1	Company Name	Required	Name of customer.
	1.2	Company ID #	Required	Customer ID #.
	1.3	Mailing Address	Required	Physical post-office mailing address of company.
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.
	1.5	Contact Phone #	Required	Phone number of this person.
	1.6	Contact Fax #	Required	Fax number of this person.
	1.7	Contact Email	Required	Email address of this person.
2. Product Information	2.1	Product Name	Required	Common trade name.
	2.2	Customer's Part/Material #	Required	Customer's internal part/material #. May be same as Supplier's part/material #.
	2.3	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.
	2.4	Are you a Downstream User of Product in EU?	Required	See REACH definitions.
3. Substance Information—Note: must be iterated for each substance in product. List of substances in product should be provided by Supplier to Customer, using "SUBSTANCES & HAZARDS" Sheet before Customer completes this section.	3.1	Substance Name	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Take exact name from "SUBSTANCES & HAZARDS" Sheet, so will correspond to supplier's name.
	3.2	Do you plan to register this substance?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	If not, should state reason why not.
	3.3	Do you plan to pre-register this substance?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	If not, should state reason why not.
	3.4	Envisaged tonnage band/ registration deadline	Required, if answer to 3.1 or 3.2 is "YES"	1-10 t, 10-100 t, 100-1000 t, >1000 t.
	3.5	Are there any restricted uses for the substance? If so, do any prohibit your uses per "USAGE" Sheet?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (supplier) can specify restricted uses on "USAGE" Sheet, Column H. Responder (customer) can then ascertain whether each individual use is restricted. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are restricted per Annex 17, by filling in Column E. Bear in mind restrictions apply to particular substances rather than whole products.
	3.6	Has an authorization application been filed for use of substance in this product? If so, does it cover your uses per "USAGE" Sheet?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Supplier should inform customer, if and when an authorization is sought. Requestor (supplier) can specify applied-for uses on "USAGE" Sheet, Column I. Responder (customer) can then ascertain whether each individual has been applied for. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are applied for, by filling in Column F. Bear in mind authorizations apply to particular substances rather than whole products.

TABLE 2 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments
	3.7	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.
	3.8	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Customer may have useful information to contribute either directly to supplier or as a third party data holder for the entire SIEF.
	3.9	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.
4. Business Information	4.1	Will you cease use of this Product due to REACH?	Required	If ending purchases, should specify when purchase will cease.
	4.2	Will Supplier's CSR cover Customer's uses of Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (supplier) can specify all uses he supports on "USAGE" Sheet , Column G, and responder (customer) can then ascertain whether his uses are encompassed within Column G. Alternatively, responder (customer) can list all his uses in Column C, then send back to supplier for the supplier to determine whether each individual downstream use is supported and to record the answer in Column D.

TABLE 3 LIST OF USES Referenced in Upstream and Downstream Questions 4.2, to be completed by both Customer (optionally) and Supplier

TYPICAL PROTOCOL WILL BE FOR CUSTOMER TO FIRST REVEAL USES OR USE CATEGORIES IN COLUMN C TO SUPPLIER, WHO WOULD THEN ANSWER WHICH OF THESE USES WILL BE COVERED IN COLUMN D. ALTERNATIVELY, SUPPLIER COULD LIST ALL USES SUPPORTED – IN COLUMN E, AND THEN CUSTOMER COULD CHECK TO SEE IF HIS WERE COVERED ON THIS LIST, THEN MERELY ANSWER “YES” OR “NO” ON UPSTREAM QUESTION 4.2. IF ANSWER IS “NO” AND CUSTOMER DOES NOT WISH TO REVEAL USES, HE MUST CONDUCT HIS OWN SAFETY ASSESSMENT. NOTE THAT ALL QUESTIONS ARE SUBSTANCE-SPECIFIC.							
USE #	DOWNSTREAM CUSTOMER USES THIS PRODUCT FOR THE FOLLOWING USES:	IS CUSTOMER USE SUPPORTED BY SUPPLIER CSR?	IS CUSTOMER USE PROHIBITED BY AN ANNEX 17 RESTRICTION?	IS CUSTOMER USE COVERED BY AN AUTHORIZATION APPLICATION?	UPSTREAM SUPPLIER CSR SUPPORTS THE FOLLOWING USES FOR THIS PRODUCT:	UPSTREAM SUPPLIER IS AWARE OF THE FOLLOWING ANNEX 17 RESTRICTIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):	UPSTREAM SUPPLIER HAS APPLIED FOR THE FOLLOWING AUTHORIZATIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):
	(TO BE COMPLETED BY CUSTOMER)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
...etc.							

TABLE 4

List of Substances in Product to be provided by Supplier to Customer		To be populated by supplier.																		
		Supplier should place “Y” in any boxes below for any substance for which he possesses hazard data.																		
substance #	substance name	human health hazard assessment, see Annex 1, Section 1 of REACH	physicochemical hazard assessment, see Annex 1, Section 2 of REACH	environmental hazard assessment, see Annex 1, Section 3 of REACH	PBT and vPvB assessment, see Annex 1, Section 4 of REACH	exposure assessment, see Annex 1, Section 5 of REACH	risk characterization, see Annex 1, Section 6 of REACH	first aid measures, see Annex 2, Section 4 of REACH	fire fighting measures, see Annex 2, Section 5 of REACH	accidental release measures, see Annex 2, Section 6 of REACH	handling and storage, see Annex 2, Section 7 of REACH	exposure control/personal protection, see Annex 2, Section 8 of REACH	physico-chemical properties, see Annex 2, Section 9 of REACH	stability and reactivity, see Annex 2, Section 10 of REACH	toxicological information, see Annex 2, Section 11 of REACH	ecological information, see Annex 2, Section 12 of REACH	disposal considerations, see Annex 2, Section 13 of REACH	transport information, see Annex 2, Section 14 of REACH	regulatory information, see Annex 2, Section 15 of REACH	other information, see Annex 2, Section 16 of REACH
3.1.a	Use substance name from Upstream Question 3.1																			
3.1.b	Use substance name from Upstream Question 3.1																			
3.1.c	Use substance name from Upstream Question 3.1																			
3.1.d	Use substance name from Upstream Question 3.1																			
...etc.	...etc.																			

TABLE 5 LIST OF SVHC's Referenced in Upstream Question 3.5

To be populated by customer.		CAS#	EC#
Disclosure of substances on this list in any preparation or article is MANDATORY.			
List Item #	Substance Name		
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
...etc.			

6. What Information Shall be Communicated Through the Supply Chain?

6.1 The REACH regulation provides certain obligatory data elements that shall be exchanged between certain actors in the supply chain, but does not stipulate a complete base set of data to be communicated throughout all supply chains for all actors. Rather, REACH's 15 Titles and 17 Annexes detail a set of obligations that affect EU-based companies. A collection of technical guidance documents, the RIPs, then provide general guidelines as to how companies might meet these obligations through collaborative engagement of their supply chains, both inside and outside of Europe.

6.2 If, however, one looks at the dataset that would be necessary to make informed decisions regarding the critical elements of REACH, that is, preregistration, registration, evaluation, authorization, restriction, notification, testing, exemptions, hazards, risks, exposure scenarios, alternative substances, and so forth, there are certain key data elements that emerge as having highest priority.

6.2.1 Some of these elements are described in the RIPs. For the purpose of supply chain communication of critical data elements, RIPs 3.4, 3.5, and 3.8, which are included in Annexes 6, 7 and 8 of REACH RIP Guidance Documents, are important in highlighting information exchange needs.

6.3 From the REACH Regulation itself, there are some directly mandated information exchange requirements for companies doing business in the EU. Most of the case studies contained in the RIPs envision that data will be exchanged on a product-by-product basis, as products are the most convenient units of currency in data exchange throughout the supply chain. However, as REACH regulates substances in products rather than the products themselves, all this product data shall be evaluated at the substance level.

6.3.1 A summary of these requirements follows. Note that this data shall flow bidirectionally up and down the supply chain.

6.3.1.1 *Article 31*—Safety data sheet requirements data needs:

- (1) CAS number
- (2) Registration number
- (3) Identity of substance/preparation
- (4) EINECS or ELINCS number
- (5) Use of substance/preparation
- (6) Company identity

(7) Emergency telephone number

(8) Classification and labeling consistent with REACH Title II

(9) Concentration of constituent substances (for preparations)—shall indicate for at least all hazardous substances as defined by Directives 1999/45/EC and 67/548/EC and for other hazardous substances of equivalent concern

(10) First aid measures

(11) Fire-fighting measures

(12) Accidental release measures

(13) Handling and storage

(14) Exposure controls/personal protection

(a) Exposure limits

(b) Occupational exposure controls

(c) Environmental exposure controls

(15) Physical properties, that is, boiling point, pH, and density

(16) Toxicological information

(17) Ecological information

(18) Disposal information

(19) Transport information

(20) Regulatory information (at community level)

6.3.1.2 *Article 32*—Downstream supply chain communication requirements for substances and preparations that do not require safety data sheets:

(1) Is the substance subject to authorization, restriction or registration? If so, what are the details of the plan and status of the process?

(2) Any other risk management information.

6.3.1.3 *Article 33*—Downstream information requirements for articles:

(1) For SVHC, in articles at above 0.1 weight %, what are the SVHC and what are the safe use requirements?

(2) SVHC information (at a minimum, identity of the substance) shall be available to consumers within 45 days of any request.⁵

⁵ Comments on choosing an SVHC List: If full substance disclosure is not used, suppliers must list all substances on an SVHC List. Several industries are developing their own SVHC Lists, however the Candidate List of the European Chemicals Agency will be the official legally binding list. This ASTM standard does not specify any particular industry list; it only specifies that, in the absence of full substance disclosure, some SVHC List must be referenced. Even if full supplier substance disclosure occurs, the customer must still evaluate these substances against an SVHC List.

6.3.1.4 *Article 34*—Upstream supply chain communication requirements for substances and preparations:

(1) New, updated information regarding risks or hazards shall be communicated by customers to upstream suppliers as soon as it becomes available to the customers.

6.3.1.5 *Article 35*—Information access for workers:

(1) Safety data sheet information (Articles 31 and 32 of REACH) shall be furnished to any workers who may be exposed to substances or preparations.

6.4 *Industry Guidance on Information to be Exchanged:*

6.4.1 Industry sector REACH guidance has provided lists of data to be collected from the supply chain. Official industry REACH guidance for several industries is given in REACH Guidance Standards, [Annexes 1-5](#). Some of these guidance documents list data that would need to be communicated through the supply chain. For example, the Automotive and European Engineering Industries (Orgalime) Guides⁶ both recommend information content to be gathered from supply chains for REACH compliance. Many of the data elements found in industry guides are already described in [6.3](#), as they were taken directly from the REACH regulation.

6.4.2 Additional information requirements/supply chain questions from the industry guides not discussed in [6.3](#) include:

- (1) Amount used per year (kg)
- (2) Supplier name and address
- (3) Is it imported by you?
- (4) Is the substance critical for your business?

(5) Have you contacted the supplier about registration for your use?

(6) Is there a confidentiality issue regarding specific uses?

(7) Will the substance be preregistered/registered? When?

(8) Will the substance/preparation continue to be available for purchase?

(9) Can SVHCs be substituted (if it is likely to be withdrawn in future)?

(10) If you need to produce data package for registration, what data are necessary?

(11) Who else supplies the substance or preparation and can you form a consortium?

(12) Who are your downstream users and for what use do they use the substance?

6.5 A standard REACH dataset to be exchanged within all supply chains is suggested in [Tables 1-5](#). To use [Tables 1-5](#), first, as per [Fig. 1](#), determine your own legal and market obligations under REACH. Then per [Figs. 2 and 3](#), map out your entire supply chain in upstream and downstream directions. Then, approach those actors in your supply chain in both the upstream and downstream directions.

6.6 [Fig. 4](#) illustrates the information flow pathways for these data requirements, describing first an exchange initiated by a customer and then an exchange initiated by a supplier.

6.7 Case Studies 1-3 in [Annex A1-Annex A3](#) illustrate the process of exchanging data for three representative scenarios.

7. Keywords

7.1 chemicals; REACH; supply chain

⁶ Available from www.orgalime.org.

ANNEXES

(Mandatory Information)

A1. CASE STUDY 1: INFORMATION EXCHANGE INITIATED BY SOLDER IMPORTER (CUSTOMER) TO NON-EU SOLDER MANUFACTURER (SUPPLIER)

A1.1 Henry Ohm, who is the REACH-responsible individual for Circuit Board Importers, Inc. (CBI), prepopulates the “Downstream Questions” sheet in advance of sending out its request to his supplier, Lead Free Solder, Inc. He wishes to have Lead Free’s response within two weeks and notes that in the “Please respond by” section (Section 0).

A1.2 Sections 1.1 and 1.3-1.7 are information that CBI has in its compliance database, which is used to populate automatically requests to suppliers. Section 1.2 sometimes differs for CBI from supplier to supplier, so the specific customer number “222” that Lead Free Solder uses to communicate with CBI is used in Section 1.2.

A1.3 CBI wishes to know about the solder that Lead Free sells them, which CBI imports into several EU member states (thus requiring a “yes” answer to 2.3). CBI completes the remainder of the product-specific information in Section 2 of the “Downstream Questions” sheet, identifying the product as “Special Solder” with the CBI part number “222222.”

A1.4 CBI is unable to complete Section 3 of the “Downstream Questions” sheet because Lead Free needs to first provide the substance information before CBI can answer the specific question, so Section 3 is left blank in the prepopulation step.

A1.5 Section 4 also may require some input from Lead Free before CBI can complete it. Question 4.1 is difficult to answer without a knowledge of which substances are contained in the product. For example, if there are no SVHCs in the solder, there is little reason for CBI to change its purchasing patterns because of REACH. If, however, the solder contains a carcinogen per Directive [67/548/EEC](#), it would be more likely that CBI will begin to explore alternative sources of solder.

A1.6 Question 4.2 will also require the supplier to respond in advance of the customer’s answer. If the customer does not wish to reveal his uses to the supplier, he may leave Question 4.2 blank and direct the supplier to complete the “Usage” sheet and then subsequently make the determinations as to whether

the customer's uses are covered by the supplier's chemical safety report (CSR) exposure scenario(s), which will be listed by the supplier in the "Usage" sheet. In this case, CBI has no problem revealing its use as "soldering wires to connectors on board," which is listed on the "Usage" sheet in Column C. However, CBI must still wait for Lead Free to look at the "Usage" sheet, at which point, Lead Free will respond in Columns D, E, and F as to whether CBI's uses are covered by a lead-free CSR, are prohibited by an **Annex 17** restriction, or are the subject of an application authorization.

A1.7 Also note that it is conceivable that occasionally other sections of the form may not be able to be completed without some input from another actor in the supply chain. For example, it is not always trivial to determine whether you or your supplier is the actual importer of record for a product (Questions 2.3 and 2.4 of "Downstream Questions" sheet). CBI's purchasing and legal staff conferred and discovered that it was importing special solder and provided the answers to Questions 2.3 and 2.4 to Henry Ohm. However, few (including Mr. Ohm) had known that CBI actually imported this product. Up until the process of gathering and exchanging REACH information, almost everyone at CBI had assumed that Lead Free was an EU-based company since nearly all of CBI's dealings had been with Lead Free's branch sales office in the United Kingdom.

A1.8 Finally, CBI imports a standard electronics industry SVHC list into the "List of SVHCs" sheet. CBI has downloaded this list from an electronics industry organization website. This (fictional) list contains 500 substances and is representative of the consensus of what constitutes an SVHC for companies in the electronics industry. CBI could also add substances to this list if it wished to consider borderline SVHCs that may end up on the EU Candidate List someday. CBI realizes that if a substance appears on the EU Candidate List, it will be responsible for querying its suppliers on the presence of that new substance in CBI products. CBI subscribes to an electronics industry alert service that notifies all industry organization members when a new substance that is not on the electronics industry SVHC list appears on the EU Candidate List website. When something like this happens, CBI immediately queries any suppliers who have not provided full substance information, allowing them 14 days to identify the new SVHC.

A1.9 CBI then e-mails the file to the general business contact at Lead Free, who, after some searching around internally, locates the right department for REACH compliance and forwards it on to Matt Tinne, who is the REACH-responsible individual at Lead Free. Fortunately, there are still seven days left to respond when Mr. Tinne receives the form.

A1.10 Mr. Tinne fills out the "Upstream Questions" sheet and requests that CBI return the fully completed form to Lead Free within 21 days and notes this in Section 0. Next, he completes the Section 1 contact information. CBI will now be able to bypass the general business contact at Lead Free in future information exchanges and communicate directly with Mr. Tinne.

A1.11 Section 2 of the "Upstream Questions" sheet is completed with the Lead Free part/material number "111111," which will correspond to the CBI part/material number "222222." Sections 2.3-2.6 are answered based on an understanding of the REACH definitions for substances/preparations/articles and the manufacturer, importer, and downstream user actors in the supply chain. Solder is a mixture of substances that are not formed into any definite shape or form and is clearly a "preparation" under REACH. As a U.S.-based company, Lead Free is a non-actor in the supply chain, so it does not fall into any of the manufacturer/importer/downstream user categories.

A1.12 Lead Free completes Section 3 based on its RoHS compliance substance database. Much of the substance information, that is, (3.1) names, (3.2) CAS numbers, and (3.7) percent composition are able to be exported from the RoHS database into the REACH form. Information that is not readily available, such as (3.3) EC number, is looked up on the EU websites, such as <http://ecb.jrc.it/existing-chemicals>.

A1.13 Knowledge about registrants (3.4) will generally be available by 2010 for common metals like silver, copper, and tin; but as this form is being completed in 2008, no such information yet exists. Lead Free checks the "List of SVHCs" sheet with the list of substances imported by CBI and determines that none of the three substances are SVHCs per the list, so it answers "No" to Question 3.5 for each of the three substances. All the substances are phase-in substances per REACH definitions (Question 3.6).

A1.14 As solder is a preparation, rather than an article, 3.8 is not applicable, and as Lead Free is a U.S.-based company, 3.10-3.12 are not relevant as there is no legal obligation for Lead Free to consider whether a registration is necessary or not. Although Lead Free is not legally obligated to do so, Matt Tinne consults the list of restricted uses in **Annex 17** of REACH, discovers that none apply to tin, silver, or copper, and notes this for each in Question 3.13.

A1.15 As these substances are not SVHCs, 3.14 and 3.15 are not applicable as there are no immediate risks for any of the substances being added to **Annex 14**, which would require an authorization application.

A1.16 Because it is not an importer and its substances are not likely SVHCs, Lead Free has not seen a need to join an industry consortium and answers "no" to 3.16. From Lead Free's knowledge of REACH, there are no relevant exemptions for the product they are selling, although it is conceivable that some of Lead Free's customers may be able to avail themselves of application-specific exemptions, that is, a defense-related exemption for a military application.

A1.17 Lead Free has a variety of health and safety information from its Materials Safety Data Sheets and other sources. Although the data do not exactly correspond to what is needed under REACH, Lead Free indicates the availability of the data by answering "yes" to Question 3.18 for each of the

substances. Lead Free then goes to the “Substances & Hazards” sheet and enters each of the three substance names and fills in a “Y” for each type of data it possesses on each substance. This safety will not necessarily be exchanged at this point, but CBI will now be aware that Lead Free is a potential source of this information in case CBI needs it to control adequately risks of using the substances.

A1.18 Lead Free sees no issues with continuing the supply of special solder under the new REACH regime and answers 4.1 with a “yes.” Question 4.2 is not relevant as Lead Free is based in the United States and does not have to complete a CSR for its product.

A1.19 Finally, Section 5 is completely inapplicable as Lead Free has no knowledge about registrants. Upon completing all sections, Mr. Tinne has a colleague review the sheets for accuracy and then sends it on to Henry Ohm at CBI.

A1.20 Mr. Ohm considers the new information provided in “Upstream Questions” in Section 3 in “Usage” and “Substances & Hazards” by Lead Free. He is now able to complete Section 3 of “Downstream Questions” based on the substance information he now has.

A1.21 Section 3.1 is populated now with the names given by Lead Free for the three substances. Upon aggregating the amounts of each substance in all preparations and substances purchased (including preparations and substances from suppliers other than Lead Free), CBI determines that the copper and silver do not rise to the 1 tonne/year threshold for registration, but tin does require a registration dossier (Question 3.3) to be completed by 2018 as it is imported in the 1 to 10t tonnage band (Question 3.4).

A1.22 CBI agrees with Lead Free’s assessment that there are no restrictions or authorizations with which to be concerned (Questions 3.5-3.7). CBI has joined a tin consortium that is open to participation from data holders such as Lead Free (3.8).

CBI is not aware of any exemptions for any of the three substances and answers 3.9 with a “no” for each substance.

A1.23 Turning to Section 4, Mr. Ohm answers in 4.1 that CBI is confident that it will be able to continue purchase and import the special solder product, as it is adequately prepared to address the new REACH requirements, particularly with the support provided by Lead Free. Finally, Section 4.2 is determined to be “not applicable” since Lead Free is based in the United States and not under EU jurisdiction.

A1.24 Upon completion, Mr. Ohm transmits the form to Mr. Tinne, completing the round trip of the data and ensuring that both parties have the same copy of the information. It is, of course, possible that lapses in communication, needed clarifications, or changes to the information will require future iterations of this process, but the basic foundation of the process has now been laid.

A1.25 CBI will have to consider which suppliers and customers to turn to next to complete its dataset for its REACH-impacted products. In many cases, parties to information exchange will need to draw in other parties to complete their communications. For example, CBI may not be able to determine whether it needs to complete a registration until CBI has aggregated the amounts of substances it purchases from all suppliers. Similarly, manufacturers of complex assemblies and preparations may need to roll up information from multiple suppliers before they can answer percentage composition questions for their own customers. In certain cases, it may be advisable to return partially completed forms indicating which data is lacking and what the expected wait time is for full completion. The other party to the information exchange may be able to make decisions such as threshold determinations based on partial information; furthermore, a significant delay in responding may put you at a competitive disadvantage relative to companies who are more responsive.

TABLE A1.1 Case Study 1, Solder—UPSTREAM QUESTIONS: Information Request—Upstream Direction, Supplier would populate for Customer

0.	Data	Required or Optional?	Expected Response/Comments	Example	
1. Company Information - Supplier	1.1	Company Name	Required	Name of supplier/manufacturer.	Lead Free Solder, Inc.
	1.2	Company ID #	Required	Supplier/Vendor ID #	111
	1.3	Mailing Address	Required	Physical post-office mailing address of company.	123 Leadfree Drive Rohsville, USA
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	Matt Tinne
	1.5	Contact Phone #	Required	Phone number of this person.	123-555-1111
	1.6	Contact Fax #	Required	Fax number of this person.	123-555-1112
	1.7	Contact Email	Required	Email address of this person.	matt.tinne@leadfree.com

TABLE A1.1 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example		
2. Product Information	2.1	Product Name	Required	Common trade name.	Special Solder		
	2.2	Supplier's Part/ Material #	Required	Supplier's internal part/material #. May be same as customer's part/material #.	111111		
	2.3	Is product a Substance, Preparation or Article?	Required	See REACH definitions.	Preparation		
	2.4	If it is an Article, what is Article's weight (kg)?	Optional, provide justification if omitted	Preferably this information is exchanged as customer will need to roll-up substance info and divide by article weight to determine 0.1% threshold for SVHC's.	N/A		
	2.5	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	No		
	2.6	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	No		
3. Substance Information NOTE: Must iterate through Section 3 for EACH SUBSTANCE IN PRODUCT	3.1	Substance Name	Optional, provide justification if omitted	Preferably official IUPAC name, but see RIP 3.10 for substance naming conventions.	Silver	Copper	Tin
	3.2	CAS number	Optional, provide justification if omitted	May not be applicable, as per RIP 3.10, CAS numbers do not always correspond to unique substances.	7440-22-4	7440-50-8	7440-31-5
	3.3	EC Number (EINECS, ELINCS or NLP)	Optional, provide justification if omitted	See http://ecb.jrc.it/esis/ for #'s.	231-131-3	231-159-6	231-141-8
	3.4	Do you know of any company who will register this substance?	Optional, provide justification if omitted	Will rarely be available in early stages of REACH.	N/A	N/A	N/A
	3.5	Is it an SVHC, per the list we reference—see "LIST OF SVHC's" Sheet	Required.	Requestor should reference his own list, i.e. aerospace, automotive, EU candidate list, JIG list, or customized list.	No	No	No
	3.6	Is it a phase-in-substance?	Optional, provide justification if omitted	Does it already exist on the market, per REACH definition of "existing substance"?	Yes	Yes	Yes
	3.7	If in Preparation or Article, what is wt/wt concentration (%) ?	Optional, provide justification if omitted	Should be supplied at least for all substances >0.1% concentration.	3.0%	0.5%	96.5%
	3.8	If in Article, is it intentionally released?	Required	See REACH definitions.	N/A	N/A	N/A
	3.9	What is Classification and Labeling category?	Required	See Articles 4 and 6 of 67/548/EEC for categories; also, see ECHA-published Article 112 Classification and Labeling Inventory, when it becomes available.	N/A	N/A	N/A
	3.10	Do you plan to register substance?	Required	If not, should state reason why not.	No, not manufacturer or importer	No, not manufacturer or importer	No, not manufacturer or importer

TABLE A1.1 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example		
	3.11	Do you plan to pre-register substance?	Required	If not, should state reason why not.	No, not manufacturer or importer	No, not manufacturer or importer	No, not manufacturer or importer
	3.12	Envisaged tonnage band/registration deadline	Required	1-10 t, 10-100 t, 100-1000 t, >1000 t.	N/A	N/A	N/A
	3.13	Are there any restricted uses for the substance? If so, do any prohibit requestor's (customer's) uses per "USAGE" Sheet?	Required	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use is restricted in Column E. Alternatively, supplier can list all restricted uses in Column H, and customer can then ascertain whether his uses are restricted per Annex 17 . Keep in mind restrictions apply to particular substances rather than whole products.	No	No	No
	3.14	Has an authorization application been filed for use of substance in this product? If so, does it cover requestor's (customer's) uses per "USAGE" Sheet?	Required	Supplier should inform customer, if and when an authorization is sought. Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use has been applied for in Column F. Alternatively, supplier can list all authorization applications in Column I, and customer can then ascertain whether his uses will be applied for, or whether he must complete his own application for his use(s). Keep in mind authorizations apply to particular substances rather than whole products.	N/A	N/A	N/A
	3.15	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	N/A	N/A	N/A
	3.16	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Supplier may have useful information to contribute either directly to customer or as a third party data holder for the entire SIEF.	No	No	No
	3.17	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	No	No	No
	3.18	Do you possess any hazard or toxicity data, or both, including basic physico-chemical properties of the substance? Unless this has been provided in an SDS or CSR, or both, please indicate possession of such data by placing a "Y" in appropriate column of "SUBSTANCES & HAZARDS" Sheet.	Required, if supplier possesses any such data. Any such data is likely to be in a lengthy report or study format and should be delivered separately from the information in this form.	The requirements of Section 3.18 can be fully met with a SDS or CSR, or both. If either of these have been communicated, Upstream Question 3.18's answer can simply reference those documents. However, since SDS's are not required for articles or for products purchased outside of EU, and CSR's are not required for substances manufactured/imported <10 tonnes/yr, hazards data will need to be communicated via this question for many products.	Yes	Yes	Yes
4. Business Information - Supplier	4.1	Will you continue to supply this product?	Required	If not, should specify when production will cease.	Yes		
	4.2	Will your CSR cover my uses of your Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use is supported in Column D. Alternatively, supplier can list all uses supported in Column G, and customer can then ascertain whether his uses are encompassed in Column G.	N/A, not in EU		

TABLE A1.1 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example
5. Only Rep Information	5.1	Registrant Name	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.2	Registrant Physical Address	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.3	Registrant Contact Individual	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.4	Registrant Phone #	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.5	Registrant Email	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.6	Is this Registrant your Only Representative?	Required if answer to 3.4 is YES	Only Rep will be required to provide registration number to its customers	N/A

TABLE A1.2 Case Study 1, Solder—DOWNSTREAM QUESTIONS: Information Request—Downstream Direction, Customer would populate for Supplier

0.		Data	Required or Optional?	Expected Response/Comments	Example
1. Company Information - Customer	1.1	Company Name	Required	Name of customer.	Circuit Board Importers, Inc.
	1.2	Company ID #	Required	Customer ID #.	222
	1.3	Mailing Address	Required	Physical post-office mailing address of company.	4911 ECHA Drive Helsinki, Finland
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	Henry Ohm
	1.5	Contact Phone #	Required	Phone number of this person.	011-222222
	1.6	Contact Fax #	Required	Fax number of this person.	011-222223
	1.7	Contact Email	Required	Email address of this person.	henry.ohm@cbi.com
2. Product Information	2.1	Product Name	Required	Common trade name.	Special Solder
	2.2	Customer's Part/Material #	Required	Customer's internal part/material #. May be same as Supplier's part/material #.	222222
	2.3	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	Yes, importer
	2.4	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	No

TABLE A1.2 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example			
3.	Substance Information—Note: must be iterated for each substance in product. List of substances in product should be provided by Supplier to Customer, using “SUBSTANCES & HAZARDS” Sheet before Customer completes this section.	3.1	Substance Name	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Take exact name from “SUBSTANCES & HAZARDS” Sheet, so will correspond to supplier’s name.	Silver	Copper	Tin
		3.2	Do you plan to register this substance?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	If not, should state reason why not.	No, not above 1 tonne/yr import.	No, not above 1 tonne/yr import.	Yes.
		3.3	Do you plan to pre-register this substance?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	If not, should state reason why not.	No, not above 1 tonne/yr import.	No, not above 1 tonne/yr import.	Yes.
		3.4	Envisaged tonnage band/registration deadline	Required, if answer to 3.1 or 3.2 is “YES”	1-10 t, 10-100 t, 100-1000 t, >1000 t.	N/A	N/A	1-10t / Jun 1, 2018
		3.5	Are there any restricted uses for the substance? If so, do any prohibit your uses per “USAGE” Sheet?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (supplier) can specify restricted uses on “USAGE” Sheet, Column H. Responder (customer) can then ascertain whether each individual use is restricted. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are restricted per Annex 17, by filling in Column E. Bear in mind restrictions apply to particular substances rather than whole products.	No	No	No
		3.6	Has an authorization application been filed for use of substance in this product? If so, does it cover your uses per “USAGE” Sheet?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Supplier should inform customer, if and when an authorization is sought. Requestor (supplier) can specify applied-for uses on “USAGE” Sheet, Column I. Responder (customer) can then ascertain whether each individual has been applied for. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are applied for, by filling in Column F. Bear in mind authorizations apply to particular substances rather than whole products.	N/A	N/A	N/A
		3.7	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	N/A	N/A	N/A
		3.8	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Customer may have useful information to contribute either directly to supplier or as a third party data holder for the entire SIEF.	No	No	Yes. Consortium is open to data holders.
		3.9	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	No	No	No

TABLE A1.2 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example
4. Business Information	4.1	Will you cease use of this Product due to REACH?	Required	If ending purchases, should specify when purchase will cease.	No
	4.2	Will Supplier's CSR cover Customer's uses of Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (supplier) can specify all uses he supports on "USAGE" Sheet, Column G, and responder (customer) can then ascertain whether his uses are encompassed within Column G. Alternatively, responder (customer) can list all his uses in Column C, then send back to supplier for the supplier to determine whether each individual downstream use is supported and to record the answer in Column D.	N/A, supplier is US-based

TABLE A1.3 Case Study 1, Solder—LIST OF USES Referenced in Upstream and Downstream Questions 4.2, to be completed by both Customer (optionally) and Supplier

0.							
TYPICAL PROTOCOL WILL BE FOR CUSTOMER TO FIRST REVEAL USES OR USE CATEGORIES IN COLUMN C TO SUPPLIER, WHO WOULD THEN ANSWER WHICH OF THESE USES WILL BE COVERED IN COLUMN D. ALTERNATIVELY, SUPPLIER COULD LIST ALL USES SUPPORTED – IN COLUMN E, AND THEN CUSTOMER COULD CHECK TO SEE IF HIS WERE COVERED ON THIS LIST, THEN MERELY ANSWER "YES" OR "NO" ON UPSTREAM QUESTION 4.2. IF ANSWER IS "NO" AND CUSTOMER DOES NOT WISH TO REVEAL USES, HE MUST CONDUCT HIS OWN SAFETY ASSESSMENT. NOTE THAT ALL QUESTIONS ARE SUBSTANCE-SPECIFIC.							
	DOWNSTREAM CUSTOMER USES THIS PRODUCT FOR THE FOLLOWING USES:	IS CUSTOMER USE SUPPORTED BY SUPPLIER CSR?	IS CUSTOMER USE PROHIBITED BY AN ANNEX 17 RESTRICTION?	IS CUSTOMER USE COVERED BY AN AUTHORIZATION APPLICATION?	UPSTREAM SUPPLIER CSR SUPPORTS THE FOLLOWING USES FOR THIS PRODUCT:	UPSTREAM SUPPLIER IS AWARE OF THE FOLLOWING ANNEX 17 RESTRICTIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):	UPSTREAM SUPPLIER HAS APPLIED FOR THE FOLLOWING AUTHORIZATIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):
USE #	(TO BE COMPLETED BY CUSTOMER)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)
1	soldering wires to connectors on board	N/A (supplier non-EEA)	N	N/A (no substances on Annex 14 list)			

TABLE A1.4 Case Study 1, Solder

List of Substances in Product to be provided by Supplier to Customer		To be populated by supplier. Supplier should place "Y" in any boxes below for any substance for which he possesses hazard data.																		
substance #	substance name	human health hazard assessment, see Annex 1, Section 1 of REACH	physicochemical hazard assessment, see Annex 1, Section 2 of REACH	environmental hazard assessment, see Annex 1, Section 3 of REACH	PBT and vPvB assessment, see Annex 1, Section 4 of REACH	exposure assessment, see Annex 1, Section 5 of REACH	risk characterization, see Annex 1, Section 6 of REACH	first aid measures, see Annex 2, Section 4 of REACH	fire fighting measures, see Annex 2, Section 5 of REACH	accidental release measures, see Annex 2, Section 6 of REACH	handling and storage, see Annex 2, Section 7 of REACH	exposure control/personal protection, see Annex 2, Section 8 of REACH	physico-chemical properties, see Annex 2, Section 9 of REACH	stability and reactivity, see Annex 2, Section 10 of REACH	toxicological information, see Annex 2, Section 11 of REACH	ecological information, see Annex 2, Section 12 of REACH	disposal considerations, see Annex 2, Section 13 of REACH	transport information, see Annex 2, Section 14 of REACH	regulatory information, see Annex 2, Section 15 of REACH	other information, see Annex 2, Section 16 of REACH
3.1.a	Tin	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.b	Silver	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.c	Copper	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

TABLE A1.5 Case Study 1, Solder—LIST OF SVHC’s Referenced in Upstream Question 3.5

To be populated by customer.			
Disclosure of substances on this list in any preparation or article is MANDATORY.			
List Item #	Substance Name	CAS#	EC#
1	Substance 1 from Electronics Industry SVHC List		
2	Substance 2 from Electronics Industry SVHC List		
3	Substance 3 from Electronics Industry SVHC List		
4	Substance 4 from Electronics Industry SVHC List		
5	Substance 5 from Electronics Industry SVHC List		
6	Substance 6 from Electronics Industry SVHC List		
7	Substance 7 from Electronics Industry SVHC List		
8	Substance 8 from Electronics Industry SVHC List		
9	Substance 9 from Electronics Industry SVHC List		
10	Substance 10 from Electronics Industry SVHC List		
...etc.	...etc, 500 substances on List		

A2. CASE STUDY 2: INFORMATION EXCHANGE INITIATED BY PLATED BOLT MANUFACTURER (SUPPLIER) TO NON-EU AUTOMOTIVE MANUFACTURER (CUSTOMER)

A2.1 Kadmium Stahl, who is the REACH-responsible individual for Rodenbach Bolt, Inc. (RBI), prepopulates the “Upstream Questions” sheet in advance of sending out its request to his customer, Motor City OEM. He wishes to have Motor City’s response within two weeks and notes that in the “Please respond by” section (Section 0).

A2.2 Sections 1.1 and 1.3-1.7 are information that RBI has in its compliance database, which is used to populate automatically requests to customers. Section 1.2 sometimes differs for RBI from customer to customer, so the specific supplier number “333” that Motor City uses to communicate with RBI is used in Section 1.2.

A2.3 RBI wishes to inform Motor City about the status of the bolts Rodenbach sells to Motor City, which RBI exports out

of several EU member states. CBI completes the remainder of the product-specific information in Section 2 of the “Upstream Questions” sheet, identifying the product as “plated bolt” with the RBI part number “333333.”

A2.4 The bolt is an article, per REACH’s definition, and weighs 0.022 kg (Questions 2.3 and 2.4). RBI indicates in 2.5 that they are manufacturing the product in the EU but are not a downstream user (2.6).

A2.5 RBI completes Section 3 based on its IMDS data. Much of the substance information, that is, (3.1) names, (3.2) CAS numbers, (3.3) EC number, and (3.7) percent composition are able to be transferred into the REACH form.

A2.6 Knowledge about registrants (3.4) will generally be

available by 2010 for common metals such as cadmium, copper, iron, and manganese; but as this form is being completed earlier, no such numbers yet exist. RBI is unable to answer Question 3.5 as it is not certain which SVHC list Motor City will use to define what is an SVHC. All the substances are phase-in substances per REACH definitions (3.6).

A2.7 None of the substances are intentionally released from the bolt (3.8). For 3.9, cadmium's risk phrases per Directive 67/548/EEC are entered for the classification and labeling information. This information is not applicable for the others as they are not hazardous per Directive 67/548/EEC. As none of these substances are intentionally released from the article, 3.10-3.12 are not relevant as there is no legal obligation for RBI to register. Mr. Stahl then consults the list of restricted uses in Annex 17 of REACH and discovers that Restriction #23 sets forth a group of restrictions for cadmium. He then notes this information in Column H of the "Usage" sheet and reports the fact that there are restrictions in Question 3.13. He also notes that no restrictions exist for iron, copper, carbon, or manganese.

A2.8 As carbon, manganese, iron, and copper are not SVHCs, 3.14 and 3.15 are not applicable as there are no immediate risks for any of the substances being added to Annex 14, which would require an authorization application. On Question 3.14, cadmium, however, may require an authorization for use, and RBI is preparing applications, but none of this will be relevant for Motor City as they are based in the United States. For 3.15, RBI informs Motor City that it is seeking an alternative that will replace cadmium by 2009 with a less hazardous substance. This change will affect Motor City, as the substitute will be offered outside of the EU also.

A2.9 Because it is not registering anything, RBI has not joined a SIEF and answers "no" to 3.16. Carbon appears in Annex 4 of REACH, meaning that sufficient information is known about its intrinsic properties so that it is considered a minimal risk and is exempted from Titles 2, 5, and 6 of REACH (see comment for carbon in 3.17). Other than that, from RBI's knowledge of REACH, there are no relevant exemptions for the product they are selling, although it is conceivable that some of RBI's EU customers may be able to avail themselves of application-specific exemptions, that is, a defense-related exemption for a military application.

A2.10 RBI has a variety of health and safety information from its safety data sheets and other sources. Although the data does not exactly correspond to what is needed under REACH, RBI indicates the availability of the data by answering "yes" to Question 3.18 for each of the substances. RBI then goes to the "Substances & Hazards" sheet and enters each of the five substance names and fills in a "Y" for each type of data it possesses on each substance. This safety information will not necessarily be exchanged at this point, but Motor City will now be aware that RBI is a potential source of this information in case Motor City needs it to control adequately risks of using the substances and meet any U.S. health and safety requirements.

A2.11 RBI sees no issues with continuing the supply of plated bolts under the new REACH regime and answers 4.1 with a "yes." Question 4.2 is not relevant, as Motor City is based in the United States and does not need a CSR for the product.

A2.12 Finally, Section 5 is completely inapplicable, as RBI has no knowledge about registrants. Upon completing all sections, Mr. Stahl has a colleague review the sheets for accuracy and then sends it on to the general business contact at Motor City OEM, who, after some searching around internally, locates the right department for REACH compliance and forwards it on to Rose Kompliant, who is the REACH-responsible individual at Motor City. Unfortunately, it is past the deadline to respond when Ms. Kompliant receives the form, so she promptly contacts Mr. Stahl letting him know the response will be late. In future information exchanges, Mr. Stahl and Ms. Kompliant will be able to communicate directly without intermediaries who may slow down the process of information exchange.

A2.13 Ms. Kompliant then populates the "Downstream Questions" sheet. She wishes to have RBI's response within six weeks and notes that in the "Please respond by" section (Section 0).

A2.14 Sections 1.1 and 1.3-1.7 are information that Motor City has in its IMDS dataset and can automatically download. Section 1.2 sometimes differs for Motor City from supplier to supplier, so the specific customer number "444" that RBI uses to communicate with Motor City is used in Section 1.2.

A2.15 Motor City is based in the United States and answers "no" to 2.3. Motor City completes the remainder of the product-specific information in Section 2 of the "Downstream Questions" sheet, identifying the product as "plated bolt" and the Motor City part number "444444."

A2.16 Ms. Kompliant considers the information provided in "Upstream Questions" in Section 3 in "Usage" and "Substances & Hazards" by RBI. She is able to complete Section 3 of "Downstream Questions" based on the substance information RBI has provided.

A2.17 Section 3.1 is populated with the names given by RBI for the five substances. Sections 3.2-3.4 are irrelevant for a U.S.-based company such as Motor City. Motor City agrees with RBI's assessment that there are no restrictions or authorizations to be concerned about for a U.S.-based customer (Questions 3.5-3.7). Motor City is not a member of any substance-specific consortium or SIEF (3.8). Motor City is not aware of any exemptions (other than the carbon-specific exemption given in REACH Annex 4) for the product and answers 3.9 with a "no" for four of the five substances.

A2.18 Turning to Section 4, Ms. Kompliant answers in 4.1 that Motor City can continue to purchase the plated bolt product as long as Rodenbach moves to replace the cadmium as scheduled. Finally, Section 4.2 is determined to be "not

applicable” since Motor City is based in the United States and not under EU jurisdiction.

A2.19 Note that often sections of the form may not be able to be completed without some input from another actor in the supply chain. For example, it is not always trivial to determine whether you or your supplier is the actual importer of record for a product (Questions 2.3 and 2.4 of “Downstream Questions” sheet). Motor City’s purchasing and legal staff conferred and discovered that it was importing plated bolts from the EU and provided the answers to 2.3 and 2.4 to Rose Kompliant. However, few (including Ms. Kompliant) had known that Motor City actually sourced this product from the EU.

A2.20 Finally, Motor City imports a standard automotive industry SVHC list into the “List of SVHCs” sheet. Motor City has downloaded this list from an automotive industry organization website. This (fictional) list contains 500 substances and is representative of the consensus of what constitutes an SVHC for companies in the automotive industry. Motor City could also add substances to this list if it wished to consider borderline SVHCs that may end up on the EU candidate list someday.

A2.21 Upon completion, Ms. Kompliant transmits the form to Mr. Stahl, completing the round trip of the data and ensuring that both parties have the same copy of the information. It is, of course, possible that lapses in communication, needed clarifications, or changes to the information will require future iterations of this process, but the basic foundation of the

process has now been laid.

A2.22 RBI is not surprised to see that cadmium appears on the automotive industry SVHC list and notes its status with a “yes” for Question 3.5 of the “Upstream Questions” sheet. “No” is entered for each of the other four substances for RBI’s own records, and ideally, the altered form should be returned to Motor City for the sake of completeness (although Motor City can easily make the determination about cadmium being on its SVHC list on its own).

A2.23 RBI will have to consider which suppliers and customers to turn to next to complete its dataset for its REACH-impacted products. In many cases, parties to information exchange will need to draw in other parties to complete their communications. For example, a customer may not be able to determine whether it needs to complete a registration until it has aggregated the amounts of substances it purchases from all suppliers. Similarly, manufacturers of complex assemblies and preparations may need to roll up information from multiple suppliers before they can answer percentage composition questions for their own customers. In certain cases, it may be advisable to return partially completed forms indicating which data is lacking and what the expected wait time is for full completion. The other party to the information exchange may be able to make decisions such as threshold determinations based on partial information; furthermore, a significant delay in responding may put you at a competitive disadvantage relative to companies who are more responsive.

TABLE A2.1 Case Study 2, Plated Bolt—UPSTREAM QUESTIONS: Information Request—Upstream Direction, Supplier would populate for Customer

0.	Data	Required or Optional?	Expected Response/Comments	Example
1. Company Information - Supplier	1.1 Company Name	Required	Name of supplier/manufacturer.	Rodenbach Bolt Inc.
	1.2 Company ID #	Required	Supplier/Vendor ID #	333
	1.3 Mailing Address	Required	Physical post-office mailing address of company.	38 Article Drive Reach am Main, Germany
	1.4 REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	Kadmium Stahl
	1.5 Contact Phone #	Required	Phone number of this person.	011-333333
	1.6 Contact Fax #	Required	Fax number of this person.	011-333334
	1.7 Contact Email	Required	Email address of this person.	kadmium.stahl@rodenbachbolt.com
2. Product Information	2.1 Product Name	Required	Common trade name.	Plated Bolt
	2.2 Supplier’s Part/Material #	Required	Supplier’s internal part/material #. May be same as customer’s part/material #.	333333
	2.3 Is product a Substance, Preparation or Article?	Required	See REACH definitions.	Article
	2.4 If it is an Article, what is Article’s weight (kg)?	Optional, provide justification if omitted	Preferably this information is exchanged as customer will need to roll-up substance info and divide by article weight to determine 0.1% threshold for SVHC’s.	0.022
	2.5 Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	Yes, manufacturer

TABLE A2.1 *Continued*

0.	Data	Required or Optional?	Expected Response/Comments	Example					
	2.6	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	No				
3. Substance Information NOTE: Must iterate through Section 3 for EACH SUBSTANCE IN PRODUCT	3.1	Substance Name	Optional, provide justification if omitted	Preferably official IUPAC name, but see RIP 3.10 for substance naming conventions.	Cadmium	Iron	Copper	Carbon	Manganese
	3.2	CAS number	Optional, provide justification if omitted	May not be applicable, as per RIP 3.10, CAS numbers do not always correspond to unique substances.	7440-43-9	7439-89-6	7440-50-8	7440-44-0	7439-96-5
	3.3	EC Number (EINECS, ELINCS or NLP)	Optional, provide justification if omitted	See http://ecb.jrc.it/esis/ for #'s.	231-152-8	231-096-4	231-159-6	231-153-3	231-105-1
	3.4	Do you know of any company who will register this substance?	Optional, provide justification if omitted	Will rarely be available in early stages of REACH.	N/A	N/A	N/A	N/A	N/A
	3.5	Is it an SVHC, per the list we reference—see “LIST OF SVHC’s” Sheet.	Required.	Requestor should reference his own list, i.e. aerospace, automotive, EU candidate list, JIG list, or customized list.	Yes	No	No	No	No
	3.6	Is it a phase-in-substance?	Optional, provide justification if omitted	Does it already exist on the market, per REACH definition of “existing substance”?	Yes	Yes	Yes	Yes	Yes
	3.7	If in Preparation or Article, what is wt/wt concentration (%) ?	Optional, provide justification if omitted	Should be supplied at least for all substances >0.1% concentration.	0.12%	99.8%	0.03%	0.03%	0.02%
	3.8	If in Article, is it intentionally released?	Required	See REACH definitions.	No	No	No	No	No
	3.9	What is Classification and Labeling category?	Required	See Articles 4 and 6 of 67/548/EEC for categories; also, see ECHA-published Article 112 Classification and Labeling Inventory, when it becomes available.	Carc. Cat. 2; R45-Muta. Cat. 3; R68-Repr. Cat. 3; R62-63-T; R48/23/25-T+; R26-N; R50-53	N/A	N/A	N/A	N/A
	3.10	Do you plan to register substance?	Required	If not, should state reason why not.	No, no intentional release	No, no intentional release	No, no intentional release	No, no intentional release	No, no intentional release
	3.11	Do you plan to pre-register substance?	Required	If not, should state reason why not.	No, no intentional release	No, no intentional release	No, no intentional release	No, no intentional release	No, no intentional release
	3.12	Envisaged tonnage band/ registration deadline	Required	1-10 t, 10-100 t, 100-1000 t, >1000 t.	N/A	N/A	N/A	N/A	N/A
	3.13	Are there any restricted uses for the substance? If so, do any prohibit requestor’s (customer’s) uses per “USAGE” Sheet?	Required	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (customer) can specify uses on “USAGE” Sheet, Column C. Responder (supplier) can then answer whether each individual use is restricted in Column E. Alternatively, supplier can list all restricted uses in Column H, and customer can then ascertain whether his uses are restricted per Annex 17 . Keep in mind restrictions apply to particular substances rather than whole products.	Yes. None impact customer’s use as customer is non-EU	No	No	No	No

TABLE A2.1 *Continued*

0.	Data	Required or Optional?	Expected Response/Comments	Example				
3.14	Has an authorization application been filed for use of substance in this product? If so, does it cover requestor's (customer's) uses per "USAGE" Sheet ?	Required	Supplier should inform customer, if and when an authorization is sought. Requestor (customer) can specify uses on "USAGE" Sheet , Column C. Responder (supplier) can then answer whether each individual use has been applied for in Column F. Alternatively, supplier can list all authorization applications in Column I, and customer can then ascertain whether his uses will be applied for, or whether he must complete his own application for his use(s). Keep in mind authorizations apply to particular substances rather than whole products.	Yes. Authorization has been filed for other customer's uses. However, since you are non-EU, authorization unnecessary for you	N/A	N/A	N/A	N/A
3.15	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	Yes, plan for 2009 substitution. This will affect non-EU exports	N/A	N/A	N/A	N/A
3.16	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Supplier may have useful information to contribute either directly to customer or as a third party data holder for the entire SIEF.	No	No	No	No	No
3.17	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	No	No	No	REACH Annex 4 exemption	No
3.18	Do you possess any hazard or toxicity data, or both, including basic physico-chemical properties of the substance? Unless this has been provided in an SDS or CSR, or both, please indicate possession of such data by placing a "Y" in appropriate column of "SUBSTANCES & HAZARDS" Sheet .	Required, if supplier possesses any such data. Any such data is likely to be in a lengthy report or study format and should be delivered separately from the information in this form.	The requirements of Section 3.18 can be fully met with a SDS or CSR, or both. If either of these have been communicated, Upstream Question 3.18's answer can simply reference those documents. However, since SDS's are not required for articles or for products purchased outside of EU, and CSR's are not required for substances manufactured/imported<10 tonnes/yr, hazards data will need to be communicated via this question for many products.	Yes	Yes	Yes	Yes	Yes

TABLE A2.1 *Continued*

0.	Data	Required or Optional?	Expected Response/Comments	Example	
4. Business Information - Supplier	4.1	Will you continue to supply this product?	Required	If not, should specify when production will cease.	Yes
	4.2	Will your CSR cover my uses of your Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (customer) can specify uses on "USAGE" Sheet , Column C. Responder (supplier) can then answer whether each individual use is supported in Column D. Alternatively, supplier can list all uses supported in Column G, and customer can then ascertain whether his uses are encompassed in Column G.	Yes
5. Only Rep Information	5.1	Registrant Name	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.2	Registrant Physical Address	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.3	Registrant Contact Individual	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.4	Registrant Phone #	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.5	Registrant Email	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A
	5.6	Is this Registrant your Only Representative?	Required if answer to 3.4 is YES	Only Rep will be required to provide registration number to its customers	N/A

TABLE A2.2 Case Study 2, Plated Bolt—DOWNSTREAM QUESTIONS: Information Request—Downstream Direction, Customer would populate for Supplier

0.	Data	Required or Optional?	Expected Response/Comments	Example	
1. Company Information - Customer	1.1	Company Name	Required	Name of customer.	Motor City OEM
	1.2	Company ID #	Required	Customer ID #.	444
	1.3	Mailing Address	Required	Physical post-office mailing address of company.	2008 ELV Drive RoHS Pointe, USA
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	Rose Kompliant
	1.5	Contact Phone #	Required	Phone number of this person.	123-555-4444
	1.6	Contact Fax #	Required	Fax number of this person.	123-555-4445
	1.7	Contact Email	Required	Email address of this person.	rose.kompliant@motorcity.com
2. Product Information	2.1	Product Name	Required	Common trade name.	Plated Bolt
	2.2	Customer's Part/Material #	Required	Customer's internal part/material #. May be same as Supplier's part/material #.	444444
	2.3	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	No
	2.4	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	No

TABLE A2.2 *Continued*

0.	Data	Required or Optional?	Expected Response/Comments	Example					
3. Substance Information—Note : must be iterated for each substance in product. List of substances in product should be provided by Supplier to Customer, using “SUBSTANCES & HAZARDS” Sheet before Customer completes this section.	3.1	Substance Name	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Take exact name from “SUBSTANCES & HAZARDS” Sheet, so will correspond to supplier’s name.	Cadmium	Iron	Copper	Carbon	Manganese
	3.2	Do you plan to register this substance?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	If not, should state reason why not.	No, not released in article	No, not released in article	No, not released in article	No, not released in article	No, not released in article
	3.3	Do you plan to pre-register this substance?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	If not, should state reason why not.	No, not released in article	No, not released in article	No, not released in article	No, not released in article	No, not released in article
	3.4	Envisaged tonnage band/ registration deadline	Required, if answer to 3.1 or 3.2 is “YES”	1-10 t, 10-100 t, 100-1000 t, >1000 t.	N/A	N/A	N/A	N/A	N/A
	3.5	Are there any restricted uses for the substance? If so, do any prohibit your uses per “USAGE” Sheet?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (supplier) can specify restricted uses on “USAGE” Sheet, Column H. Responder (customer) can then ascertain whether each individual use is restricted. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are restricted per Annex 17, by filling in Column E. Bear in mind restrictions apply to particular substances rather than whole products.	Yes. None impact customer’s use as customer is non-EU	No	No	No	No
	3.6	Has an authorization application been filed for use of substance in this product? If so, does it cover your uses per “USAGE” Sheet?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Supplier should inform customer, if and when an authorization is sought. Requestor (supplier) can specify applied-for uses on “USAGE” Sheet, Column I. Responder (customer) can then ascertain whether each individual has been applied for. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are applied for, by filling in Column F. Bear in mind authorizations apply to particular substances rather than whole products.	N/A outside EU	N/A outside EU	N/A outside EU	N/A outside EU	N/A outside EU
	3.7	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	N/A outside EU	N/A outside EU	N/A outside EU	N/A outside EU	N/A outside EU

TABLE A2.2 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example				
	3.8	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Customer may have useful information to contribute either directly to supplier or as a third party data holder for the entire SIEF.	No	No	No	No	No
	3.9	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required - but supplier should first provide list of substances in the product for the customer on “SUBSTANCES & HAZARDS” Sheet.	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	No	No	No	REACH Annex 4 exemption	No
4. Business Information	4.1	Will you cease use of this Product due to REACH?	Required	If ending purchases, should specify when purchase will cease.	No, provided cadmium is phased out by 2009				
	4.2	Will Supplier's CSR cover Customer's uses of Product? See “USAGE” Sheet.	Response required (although covering such uses is not legally required, so answer can be “NO”).	Requestor (supplier) can specify all uses he supports on “USAGE” Sheet, Column G, and responder (customer) can then ascertain whether his uses are encompassed within Column G. Alternatively, responder (customer) can list all his uses in Column C, then send back to supplier for the supplier to determine whether each individual downstream use is supported and to record the answer in Column D.	N/A				

TABLE A2.3 Case Study 2, Plated Bolt—LIST OF USES Referenced in Upstream and Downstream Questions 4.2, to be completed by both Customer (optionally) and Supplier

0. TYPICAL PROTOCOL WILL BE FOR CUSTOMER TO FIRST REVEAL USES OR USE CATEGORIES IN COLUMN C TO SUPPLIER, WHO WOULD THEN ANSWER WHICH OF THESE USES WILL BE COVERED IN COLUMN D. ALTERNATIVELY, SUPPLIER COULD LIST ALL USES SUPPORTED – IN COLUMN E, AND THEN CUSTOMER COULD CHECK TO SEE IF HIS WERE COVERED ON THIS LIST, THEN MERELY ANSWER “YES” OR “NO” ON UPSTREAM QUESTION 4.2. IF ANSWER IS “NO” AND CUSTOMER DOES NOT WISH TO REVEAL USES, HE MUST CONDUCT HIS OWN SAFETY ASSESSMENT. NOTE THAT ALL QUESTIONS ARE SUBSTANCE-SPECIFIC.							
	DOWNSTREAM CUSTOMER USES THIS PRODUCT FOR THE FOLLOWING USES:	IS CUSTOMER USE SUPPORTED BY SUPPLIER CSR?	IS CUSTOMER USE PROHIBITED BY AN ANNEX 17 RESTRICTION?	IS CUSTOMER USE COVERED BY AN AUTHORIZATION APPLICATION?	UPSTREAM SUPPLIER CSR SUPPORTS THE FOLLOWING USES FOR THIS PRODUCT:	UPSTREAM SUPPLIER IS AWARE OF THE FOLLOWING ANNEX 17 RESTRICTIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):	UPSTREAM SUPPLIER HAS APPLIED FOR THE FOLLOWING AUTHORIZATIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):
USE #	(TO BE COMPLETED BY CUSTOMER)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)
1	fastening components with bolts during assembly	Y	N	N/A		REACH Annex 17, Restriction #23 applies to Cadmium	

TABLE A2.4 Case Study 2, Plated Bolt

List of Substances in Product to be provided by Supplier to Customer		To be populated by supplier. Supplier should place "Y" in any boxes below for any substance for which he possesses hazard data.																		
substance #	substance name	human health hazard assessment, see Annex 1, Section 1 of REACH	physicochemical hazard assessment, see Annex 1, Section 2 of REACH	environmental hazard assessment, see Annex 1, Section 3 of REACH	PBT and vPvB assessment, see Annex 1, Section 4 of REACH	exposure assessment, see Annex 1, Section 5 of REACH	risk characterization, see Annex 1, Section 6 of REACH	first aid measures, see Annex 2, Section 4 of REACH	fire fighting measures, see Annex 2, Section 5 of REACH	accidental release measures, see Annex 2, Section 6 of REACH	handling and storage, see Annex 2, Section 7 of REACH	exposure control/personal protection, see Annex 2, Section 8 of REACH	physico-chemical properties, see Annex 2, Section 9 of REACH	stability and reactivity, see Annex 2, Section 10 of REACH	toxicological information, see Annex 2, Section 11 of REACH	ecological information, see Annex 2, Section 12 of REACH	disposal considerations, see Annex 2, Section 13 of REACH	transport information, see Annex 2, Section 14 of REACH	regulatory information, see Annex 2, Section 15 of REACH	other information, see Annex 2, Section 16 of REACH
3.1.a	Cadmium	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.b	Iron	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.c	Copper	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.d	Carbon	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.1.e	Manganese	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

TABLE A2.5 Case Study 2, Plated Bolt—LIST OF SVHC’s Referenced in Upstream Question 3.5

To be populated by customer.			
Disclosure of substances on this list in any preparation or article is MANDATORY.			
List Item #	Substance Name	CAS#	EC#
1	Substance 1 from Automotive Industry SVHC List		
2	Substance 2 from Automotive Industry SVHC List		
3	Substance 3 from Automotive Industry SVHC List		
4	Substance 4 from Automotive Industry SVHC List		
5	Substance 5 from Automotive Industry SVHC List		
6	Substance 6 from Automotive Industry SVHC List		
7	Substance 7 from Automotive Industry SVHC List		
8	Substance 8 from Automotive Industry SVHC List		
9	Substance 9 from Automotive Industry SVHC List		
10	Substance 10 from Automotive Industry SVHC List		
...etc.	...etc, 500 substances on List		

A3. CASE STUDY 3: INFORMATION EXCHANGE INITIATED BY FORMULATOR (CUSTOMER) TO SPECIALTY FORMULATOR (SUPPLIER)—CONFIDENTIAL BUSINESS INFORMATION ISSUE

A3.1 Ima Formulator, who is the REACH-responsible individual for Friendly Formulating (FF), prepopulates the “Downstream Questions” sheet in advance of sending out a request to her supplier, Secret Substances (SS). She wishes to have SS’s response within three weeks and notes that in the “Please respond by” section (Section 0).

A3.2 Sections 1.1 and 1.3-1.7 are information that FF has in its files, and Ima uses this data to populate requests to suppliers. Section 1.2 sometimes differs for FF from supplier to supplier so the specific customer number “666” that SS uses to communicate with FF is used in Section 1.2.

A3.3 FF wishes to know about the product that SS sells them, which FF incorporates into several preparations for

customers in the EU. Note that FF is based in Liechtenstein, an European Economic Area member, where REACH is incorporated into the laws providing for the free movement of goods within the Customs area, so the scope of REACH applies to FF, as if they were an EU-based company. FF completes the remainder of the product-specific information in Section 2 of the “Downstream Questions” sheet, identifying the product as “Preparation X” with the FF part number “666666.”

A3.4 FF is unable to complete Section 3 of the “Downstream Questions” sheet because SS needs to provide first the substance information before FF can answer the specific questions, so Section 3 is left blank in the prepopulation step.

A3.5 Section 4 also may require some input from SS before

FF can complete it. Question 4.1 is difficult to answer without a knowledge of which substances are contained in the product. For example, if there are no SVHCs in the preparation, there is little reason for FF to change its purchasing patterns as a result of REACH. If, however, the preparation contains a carcinogen per Directive [67/548/EEC](#), it would be more likely that FF will begin to explore alternative sources of supply.

A3.6 Question 4.2 will also require the supplier to respond in advance of the customer's answer. If the customer does not wish to reveal his uses to the supplier, he may leave 4.2 blank and direct the supplier to complete the "Usage" sheet and then subsequently make the determinations as to whether the customer's uses are covered by the supplier's CSR exposure scenario(s) which will be listed by the supplier in the "Usage" sheet. In this case, FF has no problem revealing its use as "mixing Preparation X with Preparation Y" which is listed on the "Usage" sheet in Column C. However, FF must still wait for SS to look at the "Usage" sheet, at which point SS will respond in Columns D, E, and F as to whether FF's uses are covered by the SS CSR, are prohibited by an [Annex 17](#) restriction, or are the subject of an application authorization.

A3.7 Also note that it is conceivable that occasionally other sections of the form may not be able to be completed without some input from another actor in the supply chain. For example, it is not always trivial to determine whether you or your supplier is the actual importer of record for a product (Questions 2.3 and 2.4 of "Downstream Questions" sheet).

A3.8 Finally, FF references the EU's Candidate List into the "List of SVHCs" sheet. FF has downloaded this list from the European Chemicals Agency website. This list (please note this list does not exist yet in reality!) contains 500 substances and is the official definition on what is an SVHC. FF could also add substances to this list if it wished to consider additional SVHCs that may end up on the EU Candidate List someday. FF realizes that if a new substance subsequently appears on the EU Candidate List, it will be responsible for querying its suppliers on the presence of that new substance in FF products. FF carefully monitors the European Chemicals Agency website to see when a new substance appears on the EU Candidate List. When this happens, FF immediately queries any suppliers who have not provided full substance information, allowing them 14 days to identify the new SVHC.

A3.9 FF then e-mails the file to the general business contact at SS who, after some searching around internally, locates the right department for REACH compliance and forwards it on to John Doe, who is the REACH-responsible individual at SS. Because of the delay in reaching the proper contact, there are only two days left to respond when Mr. Doe receives the form.

A3.10 Mr. Doe fills out the "Upstream Questions" sheet and requests that FF return the fully completed form to SS within 60 days and notes this in Section 0. Next, he completes the Section 1 contact information; FF will now be able to bypass the general business contact at SS in future information exchanges and communicate directly with Mr. Doe.

A3.11 Section 2 of the "Upstream Questions" sheet is completed with the SS part/material number "555555" which will correspond to the FF part/material number "666666" Sections 2.3-2.6 are answered based on an understanding of the REACH definitions for substances/preparations/articles and the manufacturer, importer, and downstream user actors in the supply chain. Preparation X is a mixture of substances that are not formed into any definite shape or form and is clearly a "preparation" under REACH. SS is a manufacturer of Preparation X in the EU.

A3.12 SS completes Section 3 only to the extent that it is comfortable with sharing the recipe for Preparation X. SS management decides that all substances except acrylonitrile shall not be shared with customers. John Doe obtains basic information on acrylonitrile from websites such as [www.cas.org](#) and [http://ecb.jrc.it/existing-chemicals](#) providing the content for Section 3.1 (names), Section 3.2 (CAS numbers), and Section 3.3 (EC numbers). Mr. Doe is given permission to reveal the composition of acrylonitrile in Preparation X to FF, and therefore, he is able to complete Section 3.7 (percent composition), entering the value of 17 %. For the remaining 83 % of Preparation X, SS is not willing to disclose any information. This will present some special challenges under REACH for SS and its customers, but it is not worth the risk of losing its competitive edge for SS to allow this information to be transmitted.

A3.13 Continuing his disclosures on acrylonitrile, Mr. Doe is unable to provide the name of a registrant (3.4) since he is not aware of any registrations that have been completed for acrylonitrile. He checks the "List of SVHCs" sheet against the list of substances in Preparation X and determines that acrylonitrile is in fact an SVHC per the list, so he answers "yes" to Question 3.5 for acrylonitrile.

A3.14 Acrylonitrile has been on the market many years and is considered a phase-in substance (3.6). Preparation X is a preparation, rather than an article, so 3.8 is not applicable. Classification and labeling information (3.9) is provided for acrylonitrile after Mr. Doe looks it up from Annex 1 of Directive [67/548/EEC](#).

A3.15 For questions 3.10-3.12, SS will register acrylonitrile at the 100- to 1000-tonnage band and shall complete that registration by June 1, 2013. Some of the confidential substances will also be registered, but SS is not revealing any information to FF at this time about those substances.

A3.16 John Doe then consults the list of restricted uses in [Annex 17](#) of REACH and discovers that none apply to any of the substances in Preparation X and notes this in Question 3.13.

A3.17 As none of the confidential substances are SVHCs, Questions 3.14 and 3.15 are not applicable for them. For acrylonitrile, no authorization application has been filed, but SS is gathering information in preparation of preparing an application and is researching alternative substances in advance preparation of the requirements of the authorization process.

A3.18 SS has joined an acrylonitrile SIEF, which is open to downstream user data holders, such as FF. For the other substances, SS is in SIEFs that are much more careful about how data holders participate and require SS to indemnify other members for breaches in confidentiality, so lawyers are still investigating how best to allow FF to contribute in these SIEFs (3.16). From SS's knowledge of REACH, there are no relevant exemptions for acrylonitrile in Preparation X, although it is conceivable that some of SS's customers may be able to avail themselves of application-specific exemptions, that is, a medical device exemption. SS is aware that some of the confidential substances can be considered intermediates under certain contexts and use conditions and notes this for Question 3.17, although it will be of little use to FF since they do not even know what the substances are and cannot determine under what conditions they might be considered intermediates.

A3.19 SS has a variety of health and safety information for acrylonitrile from its Materials Safety Data Sheets and other sources. Although the data does not exactly correspond to what is needed under REACH, SS indicates the availability of the data by answering "yes" to Question 3.18 for acrylonitrile. SS then goes to the "Substances & Hazards" sheet and enters acrylonitrile, and fills in a "Y" for each type of data it possesses on it. This health and safety data will not necessarily be exchanged at this point, but FF will now be aware that SS is a potential source of this information in case FF needs it to control adequately risks of using the substances. For the confidential substances, no health and safety information will be shared at this point. This may be a serious concern for FF, as it must trust SS's assurances that there are no issues with these substances without the ability to make an independent evaluation of that assertion.

A3.20 SS sees no issues with continuing the supply of Preparation X under the new REACH regime and answers 4.1 with a "yes." Question 4.2 is answered "yes" as SS will complete a CSR for acrylonitrile and, after viewing "Usage" Column C, provides assurance in Column D that "mixing Preparation X with Preparation Y" will fall under a class of use categories supported under the CSR for acrylonitrile.

A3.21 Finally, Section 5 is completely inapplicable, as SS has no ability to locate a registrant. Upon completing all sections, Mr. Doe has a colleague review the sheets for accuracy and then sends it on to Ms. Formulator at FF.

A3.22 Ms. Formulator considers the new information provided in Section 3, "Upstream Questions," in "Usage" and "Substances & Hazards" by SS. She is now able to complete Section 3 of "Downstream Questions" based on the substance information she now has received.

A3.23 Section 3.1 is populated now with the names given

by SS for the substances. Upon aggregating the amount of acrylonitrile FF purchases from all suppliers, they discover it is used in >1000 tonne/year, but FF does not need to prepare a registration dossier (Question 3.2) as it is neither a manufacturer nor importer of the substance. However, as a downstream user of >1 tonne/year of acrylonitrile, FF shall ensure there is a CSR for their use of the substance. FF answers Questions 3.2-3.4 accordingly, as it cannot register.

A3.24 FF agrees with SS's assessment that there are no restrictions or authorizations with which to be concerned (Questions 3.5-3.7). FF has not joined a consortium, but they will consider joining the acrylonitrile SIEF as a third-party data holder (3.8). FF is not aware of any exemptions for acrylonitrile and answers 3.9 with a "no" and an "N/A" for the unknown substances.

A3.25 Turning to Section 4, Ms. Formulator answers in 4.1 that FF is confident that it will be able to continue purchase of Preparation X, as it is adequately prepared to address the new REACH requirements, particularly with the support provided by SS. Because of the confidential substances, excellent communications will be necessary in this business relationship to ensure all substances are properly compliant with REACH. Finally, Section 4.2 is answered with a "yes" based on SS's assurances that its CSR will cover FF's use.

A3.26 Upon completion, Ms. Formulator transmits the form to Mr. Doe, completing the round trip of the data and ensuring that both parties have the same copy of the information. It is, of course, possible that lapses in communication, needed clarifications, or changes to the information will require future iterations of this process, but the basic foundation of the process has now been laid.

A3.27 FF will have to consider which suppliers and customers to turn to next to complete its dataset for its REACH-impacted products. In many cases, parties to information exchange will need to draw in other parties to complete their communications. For example, FF may not be able to determine whether it needs to complete a CSR for acrylonitrile until FF has aggregated the amounts of substances it purchases from all suppliers. Similarly, manufacturers of complex assemblies and preparations may need to roll up information from multiple suppliers before they can answer percentage compositions questions for their own customers. In certain cases, it may be advisable to return partially completed forms indicating which data is lacking and what the expected wait time is for full completion. The other party to the information exchange may be able to make decisions such as threshold determinations based on partial information; furthermore, a significant delay in responding may put you at a competitive disadvantage relative to companies who are more responsive.

**TABLE A3.1 Case Study 3, CBI—UPSTREAM QUESTIONS: Information Request—Upstream Direction,
Supplier would populate for Customer**

0.		Data	Required or Optional?	Expected Response/Comments	Example	
1. Company Information - Supplier	1.1	Company Name	Required	Name of supplier/manufacturer.	Secret Substances, Ltd.	
	1.2	Company ID #	Required	Supplier/Vendor ID #	555	
	1.3	Mailing Address	Required	Physical post-office mailing address of company.	55 Trade Secret Drive Proprietary Park, UK	
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	John Doe	
	1.5	Contact Phone #	Required	Phone number of this person.	011-555555	
	1.6	Contact Fax #	Required	Fax number of this person.	011-555556	
	1.7	Contact Email	Required	Email address of this person.	john.doe@ secretsubstances.com	
2. Product Information	2.1	Product Name	Required	Common trade name.	Preparation X	
	2.2	Supplier's Part/Material #	Required	Supplier's internal part/material #. May be same as customer's part/material #.	555555	
	2.3	Is product a Substance, Preparation or Article?	Required	See REACH definitions.	Preparation	
	2.4	If it is an Article, what is Article's weight (kg)?	Optional, provide justification if omitted	Preferably this information is exchanged as customer will need to roll-up substance info and divide by article weight to determine 0.1% threshold for SVHC's.	N/A	
	2.5	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	Yes, Manufacturer	
	2.6	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	No	
3. Substance Information NOTE: Must iterate through Section 3 for EACH SUBSTANCE IN PRODUCT	3.1	Substance Name	Optional, provide justification if omitted	Preferably official IUPAC name, but see RIP 3.10 for substance naming conventions.	Various Confidential Substances	acrylonitrile
	3.2	CAS number	Optional, provide justification if omitted	May not be applicable, as per RIP 3.10, CAS numbers do not always correspond to unique substances.	N/A	107-13-1
	3.3	EC Number (EINECS, ELINCS or NLP)	Optional, provide justification if omitted	See http://ecb.jrc.it/esis/ for #'s.	N/A	203-466-5
	3.4	Do you know of any company who will register this substance?	Optional, provide justification if omitted	Will rarely be available in early stages of REACH.	N/A	N/A
	3.5	Is it an SVHC, per the list we reference—see "LIST OF SVHC's" Sheet.	Required.	Requestor should reference his own list, i.e. aerospace, automotive, EU candidate list, JIG list, or customized list.	No	Yes
	3.6	Is it a phase-in-substance?	Optional, provide justification if omitted	Does it already exist on the market, per REACH definition of "existing substance"?	No	Yes
	3.7	If in Preparation or Article, what is wt/wt concentration (%) ?	Optional, provide justification if omitted	Should be supplied at least for all substances >0.1% concentration.	83% total	17.0%
	3.8	If in Article, is it intentionally released?	Required	See REACH definitions.	N/A	N/A
	3.9	What is Classification and Labeling category?	Required	See Articles 4 and 6 of 67/548/EEC for categories; also, see ECHA-published Article 112 Classification and Labeling Inventory, when it becomes available.	N/A	F; R11- Carc. Cat. 2; R45-T; R23/24/25-Xi; R37/38-41-R43-N; R51-53
	3.10	Do you plan to register substance?	Required	If not, should state reason why not.	Will register some substances	Yes
	3.11	Do you plan to pre-register substance?	Required	If not, should state reason why not.	Will pre-register some substances	Yes
	3.12	Envisaged tonnage band/ registration deadline	Required	1-10 t, 10-100 t, 100-1000 t, >1000 t.	Various dates	100-1,000t / Jun 1, 2013
	3.13	Are there any restricted uses for the substance? If so, do any prohibit requestor's (customer's) uses per "USAGE" Sheet?	Required	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use is restricted in Column E. Alternatively, supplier can list all restricted uses in Column H, and customer can then ascertain whether his uses are restricted per Annex 17 . Keep in mind restrictions apply to particular substances rather than whole products.	No	No

TABLE A3.1 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example	
	3.14	Has an authorization application been filed for use of substance in this product? If so, does it cover requestor's (customer's) uses per "USAGE" Sheet?	Required	Supplier should inform customer, if and when an authorization is sought. Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use has been applied for in Column F. Alternatively, supplier can list all authorization applications in Column I, and customer can then ascertain whether his uses will be applied for, or whether he must complete his own application for his use(s). Keep in mind authorizations apply to particular substances rather than whole products.	N/A	No
	3.15	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	N/A	Gathering data for substitution alternatives; plans unknown yet.
	3.16	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Supplier may have useful information to contribute either directly to customer or as a third party data holder for the entire SIEF.	Yes. Will send information on how you might contribute.	Yes, joined SIEF and yes, data holders welcome.
	3.17	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	Some substances are intermediates	No
	3.18	Do you possess any hazard or toxicity data, or both, including basic physico-chemical properties of the substance? Unless this has been provided in an SDS or CSR, or both, please indicate possession of such data by placing a "Y" in appropriate column of "SUBSTANCES & HAZARDS" Sheet.	Required, if supplier possesses any such data. Any such data is likely to be in a lengthy report or study format and should be delivered separately from the information in this form.	The requirements of Section 3.18 can be fully met with a SDS or CSR, or both. If either of these have been communicated, Upstream Question 3.18's answer can simply reference those documents. However, since SDS's are not required for articles or for products purchased outside of EU, and CSR's are not required for substances manufactured/imported < 10 tonnes/yr, hazards data will need to be communicated via this question for many products.	No	Yes
4. Business Information - Supplier	4.1	Will you continue to supply this product?	Required	If not, should specify when production will cease.	Yes	
	4.2	Will your CSR cover my uses of your Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (customer) can specify uses on "USAGE" Sheet, Column C. Responder (supplier) can then answer whether each individual use is supported in Column D. Alternatively, supplier can list all uses supported in Column G, and customer can then ascertain whether his uses are encompassed in Column G.	Yes	
5. Only Rep Information	5.1	Registrant Name	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A	
	5.2	Registrant Physical Address	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A	
	5.3	Registrant Contact Individual	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A	
	5.4	Registrant Phone #	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A	
	5.5	Registrant Email	Required if answer to 3.4 is YES	Registrant will be required to provide registration number to its customers	N/A	
	5.6	Is this Registrant your Only Representative?	Required if answer to 3.4 is YES	Only Rep will be required to provide registration number to its customers	N/A	

**TABLE A3.2 Case Study 3, CBI—DOWNSTREAM QUESTIONS: Information Request—Downstream Direction,
Customer would populate for Supplier**

0.		Data	Required or Optional?	Expected Response/Comments	Example	
1. Company Information - Customer	1.1	Company Name	Required	Name of customer.	Friendly Formulating	
	1.2	Company ID #	Required	Customer ID #.	666	
	1.3	Mailing Address	Required	Physical post-office mailing address of company.	2008 EEA Drive Reach-applies-in, Liechtenstein	
	1.4	REACH Responsible Individual Name	Required	Name of person which all REACH communications go to.	Ima Formulator	
	1.5	Contact Phone #	Required	Phone number of this person.	123-555-6666	
	1.6	Contact Fax #	Required	Fax number of this person.	123-555-6667	
	1.7	Contact Email	Required	Email address of this person.	ima.formulator@friendly.com	
2. Product Information	2.1	Product Name	Required	Common trade name.	Preparation X	
	2.2	Customer's Part/Material #	Required	Customer's internal part/material #. May be same as Supplier's part/material #.	666666	
	2.3	Are you a Manufacturer or Importer of Product in EU?	Required	See REACH definitions.	No	
	2.4	Are you a Downstream User of Product in EU?	Required	See REACH definitions.	Yes	
3. Substance Information—Note : must be iterated for each substance in product. List of substances in product should be provided by Supplier to Customer, using "SUBSTANCES & HAZARDS" Sheet before Customer completes this section.	3.1	Substance Name	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Take exact name from "SUBSTANCES & HAZARDS" Sheet, so will correspond to supplier's name.	Various Confidential Substances	acrylonitrile
	3.2	Do you plan to register this substance?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	If not, should state reason why not.	No, we do not know what substances are	No, customer will register
	3.3	Do you plan to pre-register this substance?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	If not, should state reason why not.	No, we do not know what substances are	No, DU cannot pre-register
	3.4	Envisaged tonnage band/ registration deadline	Required, if answer to 3.1 or 3.2 is "YES"	1-10 t, 10-100 t, 100-1000 t, >1000 t.	N/A	N/A
	3.5	Are there any restricted uses for the substance? If so, do any prohibit your uses per "USAGE" Sheet?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Supplier must inform customer, if and when, any restricted use is included in Annex 17 of REACH. Requestor (supplier) can specify restricted uses on "USAGE" Sheet, Column H. Responder (customer) can then ascertain whether each individual use is restricted. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are restricted per Annex 17, by filling in Column E. Bear in mind restrictions apply to particular substances rather than whole products.	N/A	No
	3.6	Has an authorization application been filed for use of substance in this product? If so, does it cover your uses per "USAGE" Sheet?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Supplier should inform customer, if and when an authorization is sought. Requestor (supplier) can specify applied-for uses on "USAGE" Sheet, Column I. Responder (customer) can then ascertain whether each individual has been applied for. Alternatively, customer can list all his uses in Column C, and supplier can then determine and inform customer whether his uses are applied for, by filling in Column F. Bear in mind authorizations apply to particular substances rather than whole products.	N/A	N/A
	3.7	If substance is subject to authorization, can it be substituted, and, if so, by what date do you plan to do so?	Required, if substance is on Annex 14 List.	For certain Annex 14 substances, if they can be adequately controlled, substitution is encouraged, but not legally required.	N/A	N/A

TABLE A3.2 *Continued*

0.		Data	Required or Optional?	Expected Response/Comments	Example	
	3.8	Have you joined a SIEF or Consortium for this substance, and, if so, would you welcome our participation?	Optional, provide justification if omitted	Customer may have useful information to contribute either directly to supplier or as a third party data holder for the entire SIEF.	No	No
	3.9	Are there any relevant exemptions that you are aware of for uses of this substance in this product?	Required - but supplier should first provide list of substances in the product for the customer on "SUBSTANCES & HAZARDS" Sheet.	Include exemptions from registration, evaluation, restriction, authorization, communication, etc....and any exemptions from the entire scope of REACH.	No	No
4. Business Information	4.1	Will you cease use of this Product due to REACH?	Required	If ending purchases, should specify when purchase will cease.	No	
	4.2	Will Supplier's CSR cover Customer's uses of Product? See "USAGE" Sheet.	Response required (although covering such uses is not legally required, so answer can be "NO").	Requestor (supplier) can specify all uses he supports on "USAGE" Sheet , Column G, and responder (customer) can then ascertain whether his uses are encompassed within Column G. Alternatively, responder (customer) can list all his uses in Column C, then send back to supplier for the supplier to determine whether each individual downstream use is supported and to record the answer in Column D.	Yes	

TABLE A3.3 Case Study 3, CBI—LIST OF USES Referenced in Upstream and Downstream Questions 4.2, to be completed by both Customer (optionally) and Supplier

0. TYPICAL PROTOCOL WILL BE FOR CUSTOMER TO FIRST REVEAL USES OR USE CATEGORIES IN COLUMN C TO SUPPLIER, WHO WOULD THEN ANSWER WHICH OF THESE USES WILL BE COVERED IN COLUMN D. ALTERNATIVELY, SUPPLIER COULD LIST ALL USES SUPPORTED – IN COLUMN E, AND THEN CUSTOMER COULD CHECK TO SEE IF HIS WERE COVERED ON THIS LIST, THEN MERELY ANSWER "YES" OR "NO" ON UPSTREAM QUESTION 4.2. IF ANSWER IS "NO" AND CUSTOMER DOES NOT WISH TO REVEAL USES, HE MUST CONDUCT HIS OWN SAFETY ASSESSMENT. NOTE THAT ALL QUESTIONS ARE SUBSTANCE-SPECIFIC.							
	DOWNSIDE CUSTOMER USES THIS PRODUCT FOR THE FOLLOWING USES:	IS CUSTOMER USE SUPPORTED BY SUPPLIER CSR?	IS CUSTOMER USE PROHIBITED BY AN ANNEX 17 RESTRICTION?	IS CUSTOMER USE COVERED BY AN AUTHORIZATION APPLICATION?	UPSTREAM SUPPLIER CSR SUPPORTS THE FOLLOWING USES FOR THIS PRODUCT:	UPSTREAM SUPPLIER IS AWARE OF THE FOLLOWING ANNEX 17 RESTRICTIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):	UPSTREAM SUPPLIER HAS APPLIED FOR THE FOLLOWING AUTHORIZATIONS FOR SUBSTANCES IN THIS PRODUCT (LIST NAME OF SPECIFIC SUBSTANCES ALSO):
USE #	(TO BE COMPLETED BY CUSTOMER)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER COMPLETES COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)	(TO BE COMPLETED BY SUPPLIER, IF CUSTOMER DOES NOT WISH TO REVEAL USES BY COMPLETING COLUMN C)
1	mixing Preparation X with Preparation Y	Y	N	N/A			

TABLE A3.4 Case Study 3, CBI

List of Substances in Product to be provided by Supplier to Customer		To be populated by supplier. Supplier should place "Y" in any boxes below for any substance for which he possesses hazard data.																		
substance #	substance name	human health hazard assessment, see Annex 1, Section 1 of REACH	physicochemical hazard assessment, see Annex 1, Section 2 of REACH	environmental hazard assessment, see Annex 1, Section 3 of REACH	PBT and vPvB assessment, see Annex 1, Section 4 of REACH	exposure assessment, see Annex 1, Section 5 of REACH	risk characterization, see Annex 1, Section 6 of REACH	first aid measures, see Annex 2, Section 4 of REACH	fire fighting measures, see Annex 2, Section 5 of REACH	accidental release measures, see Annex 2, Section 6 of REACH	handling and storage, see Annex 2, Section 7 of REACH	exposure control/personal protection, see Annex 2, Section 8 of REACH	physico-chemical properties, see Annex 2, Section 9 of REACH	stability and reactivity, see Annex 2, Section 10 of REACH	toxicological information, see Annex 2, Section 11 of REACH	ecological information, see Annex 2, Section 12 of REACH	disposal considerations, see Annex 2, Section 13 of REACH	transport information, see Annex 2, Section 14 of REACH	regulatory information, see Annex 2, Section 15 of REACH	other information, see Annex 2, Section 16 of REACH
3.1.a	Various confidential substances	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3.1.b	acrylonitrile	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

TABLE A3.5 Case Study 3, CBI—LIST OF SVHC’s Referenced in Upstream Question 3.5

To be populated by customer.			
Disclosure of substances on this list in any preparation or article is MANDATORY.			
List Item #	Substance Name	CAS#	EC#
1	Substance 1 from ECHA Website Candidate List		
2	Substance 2 from ECHA Website Candidate List		
3	Substance 3 from ECHA Website Candidate List		
4	Substance 4 from ECHA Website Candidate List		
5	Substance 5 from ECHA Website Candidate List		
6	Substance 6 from ECHA Website Candidate List		
7	Substance 7 from ECHA Website Candidate List		
8	Substance 8 from ECHA Website Candidate List		
9	Substance 9 from ECHA Website Candidate List		
10	Substance 10 from ECHA Website Candidate List		
...etc.	...etc, 500 substances on List		

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