

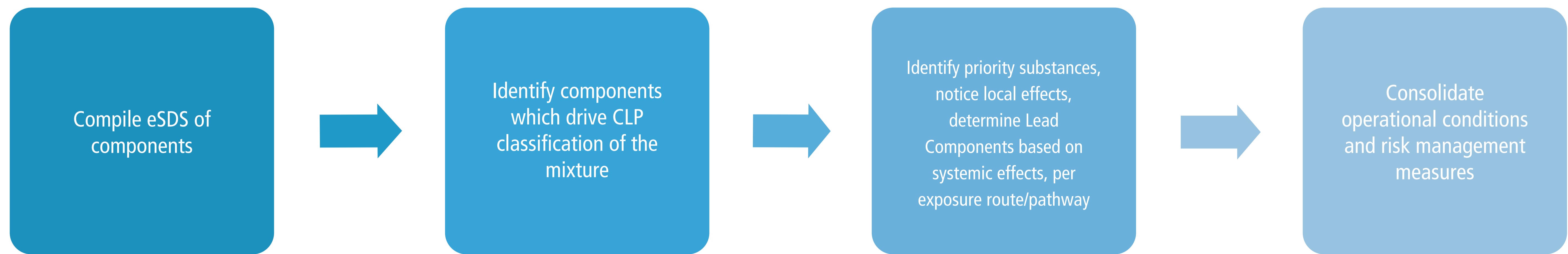
# MIXTURE SDS GENERATION

## THE LEAD COMPONENT IDENTIFICATION (LCID) – BASED INCLUSION METHOD

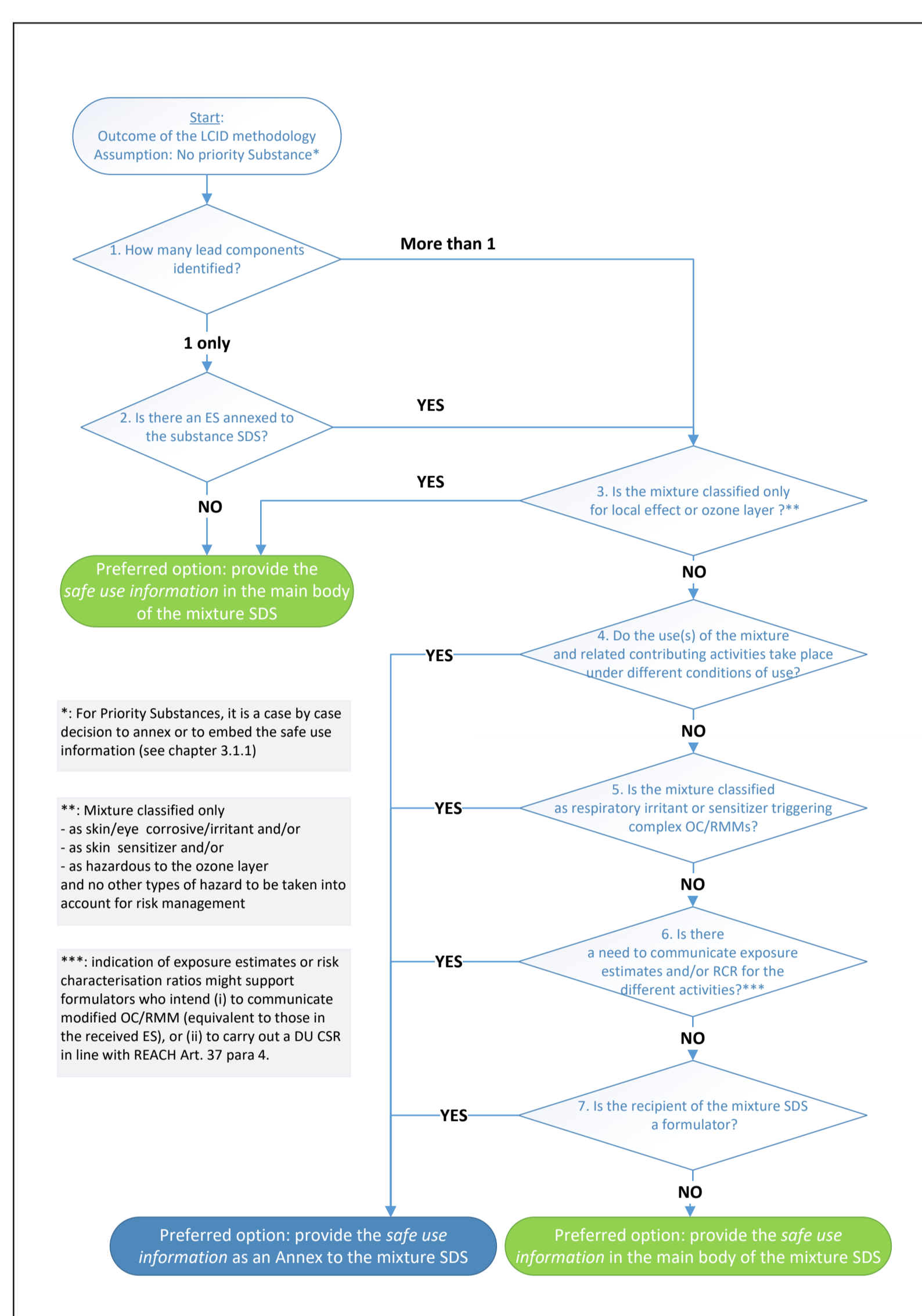


### CEFIC/CI MIXTURES TASK FORCE

### High level workflow



### Decision tree for communication route



### Examples

Example number	1a*	1b*	2a*	2b*	3	4	5a	5b	6a	6b	7
Type of mixture	Cleaning agents	Cleaning agents	Solvent mixture	Solvent mixture	Polyol for Production of PU	Polyol for Production of PU	Coatings	Coatings	Antifreeze Coolant	Antifreeze Coolant	Resins
Mixture destination	End use	End use	End use	End use	End use or formulation of mixtures	End use or formulation of mixtures	End use	End use	End use	End-use	End use
Range of uses	Narrow (1)	Narrow (1)	Narrow (1)	Narrow (1)	No info	Wide (5), 3 shown	Narrow (1)	Narrow (1)	Narrow	Narrow	Narrow (1)
Range of contributing activities	Broad (9)	Broad (9)	Narrow (1)	Narrow (1)		Broad (14)	Broad (10)	Broad (10)	Broad (8)	Broad (8)	Broad
Mixture classification for human health local effects	Yes	Yes	No	No	Yes	No	Yes	Yes	No	No	Yes
Mixture classification for human health systemic effects	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Mixture classification for environment	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes
Number of risk driving components** identified with the LCID method	2	2	1	1	2	2	2	2	2	2	2
The uses and/or contributing activities in the ES for the Lead Components are described in a similar manner	N/A	N/A	N/A	N/A	N/A	No	Yes	Yes	No	No	No
Conditions of use in the ES for the Lead Components expressed in similar manner	N/A	N/A	N/A	N/A	N/A	No	Yes	Yes	No	No	No
Way of including component ES	Embedded	Attached	Embedded	Attached	Embedded	Attached	Attached	Embedded	Embedded	Attached	Attached
Conclusion (preference for annex or main body or no preference)	No preference	No preference	No preference	No preference	N/A	N/A	Attached	Attached	Attached	Attached	N/A
Processing of OLR/RMMs of two or more risk driving components**	Consolidated		N/A		Consolidated	Consolidation of contributing scenarios	Consolidated		Consolidated		Not consolidated
Attachment format/style (if relevant); ES-like refers to styles applied for substances so far	--	Company style, ES-like	--	Company style, ES-like	Not relevant	Company style, ES-like	CHESAR style, ES-like		N/A	DUCC SUMI style	Tabulated format
Contributing activities expressed with:	--	PROC name	--	ERC name	None	List of PROCs	Generic name	Generic name	N/A	PROC name	Sector-specific terminology

Legend: N/A = not applicable; PU: Polyurethane, \* Examples 1 and 2 were already addressed in the Practical Guide (Annex III) as examples 2 and 8; \*\* risk driving components – Priority Substances, Lead Components and/or substances classified for human health local effects

Table 1: Overview of the characteristics of the project examples

### Example – “My Super Paint”

(Disclaimer: example shows the information-content as received from the supplier, and does not necessarily represent best practice.)

#### Annexed

**1. ES 1: Use at industrial sites: Coatings and Paints, Thinners, paint removers (PC 9a)**

**1.1. Title section**

ES name: Industrial coating product category: Coatings and Paints, Thinners, paint removers (PC 9a)

**1.2. Conditions of use affecting exposure**

**1.2.1. Control of environmental exposure: Industrial coating (ERC 4)**

Daily amount per site = 125 T/day of the mixture

Treat air emissions to provide a typical removal efficiency of 90%

Prevent discharge of undissolved substance to or recover from onsite wastewater. Consider technical advances and process upgrades (including automation) for the elimination of releases.

Treat onsite wastewater prior to receiving water discharge to provide the required removal efficiency > 97.2%

Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.

**1.2.2. Control of worker exposure**

Conditions of use applicable to all contributing scenarios

Covers use up to 8 h/day

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)

Wear chemically resistant gloves (tested to EN374) in combination with basic employee training. If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands. For further specification, refer to section 8 of the SDS.

Use suitable eye protection. For further specification, refer to section 8 of the SDS.

Assumes room temperature except for PROC 2: elevated process temperature up to 100.0 °C

\* Note by ECHA: Based on recent work under ENES project 3.2, the more appropriate phrase would be: Provide a good standard of general ventilation (at least 3 air changes per hour).

**Specific conditions of use per contributing scenario**

Contributing scenario	Specific conditions of use
Storage (PROC 1)	Store substance within a closed system.
Film formation - freeze drying, stoving and other technologies (PROC 2)	Handle substance within a closed system; Provide extract ventilation to points where emissions occur
Film formation - air drying (PROC 4)	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)
Preparation of material for application: Mixing operations: Open systems (PROC 5)	Provide a good standard of controlled ventilation (5 to 15 air changes per hour)
Preparation of material for application: Mixing operations: Closed systems (PROC 5)	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)
Spraying: Automated task (PROC 7)	Carry out in a vented booth provided with laminar airflow.
Spraying: Manual (PROC 7)	Provide a good standard of controlled ventilation (5 to 15 air changes per hour) Wear suitable respiratory protection: Inhalation - minimum efficiency of 90.0 %; For further specification, refer to section 8 of the SDS.
Drum/batch transfers: Transfer from/batch containers (PROC 8a)	Ensure material transfers are under containment or extract ventilation.
Material transfers (PROC 8b)	Ensure material transfers are under containment or extract ventilation.
Equipment cleaning and maintenance (PROC 8c)	Drain down and flush system prior to equipment break-in or maintenance.
Roller, spreader, flow application (PROC 9)	Provide extract ventilation to points where emissions occur.
Dipping, immersion and pouring (PROC 9)	Provide a good standard of controlled ventilation (5 to 15 air changes per hour).
Material transfers: Drum/batch transfers: Transfer/pouring from/batch containers (PROC 9)	Provide a good standard of controlled ventilation (5 to 15 air changes per hour).

\* Note by ECHA: Based on recent work under ENES project 3.2, the more appropriate phrase would be: Provide specifically designed and maintained LER of at least 90% effectiveness (good capturing hood type, manual extraction or enclosing hood type)

\*\* Note by ECHA: Based on recent work under ENES project 3.2, the more appropriate phrase would be: Provide enhanced mechanical room ventilation (at least 5 air changes per hour).

#### Embedded

**SECTION 6: Exposure controls/personal protection**

**6.2 Operational conditions under which the exposure controls apply** (note: Not present in Annex II)

- Covers use up to 8 h/day
- Room temperature. Except for freeze drying (up to 100 °C) and stoving (> 100 °C)

**6.2.1 Appropriate engineering controls**

Handle substance within a closed system. Provide extract ventilation to points where emissions occur.

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Provide a good standard of controlled ventilation (5 to 15 air changes per hour).

Ensure material transfers are under containment or extract ventilation.

- Film formation - freeze drying (PROC 2)
- Film formation - air drying (PROC 4)
- Preparation of material by mixing (Closed) (PROC 5)
- Preparation of material by mixing (Open) (PROC 5)
- Spraying: Manual (PROC 7)
- Roller, spreader, flow application (PROC 9)
- Dipping, immersion and pouring (PROC 9)
- Drum container/batch transfers by pouring (PROC 9a)
- Other material transfers (PROC 8b)
- Spraying: Automated task (PROC 7)

**6.2.2 Individual protection measures**

**6.2.2 (a) Eye/Face protection**

Use suitable eye protection

Safety eyewear complying with EU Standard EN166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Wear goggles for use against liquids and gas. Wear full face shield if splashes are likely to occur.

**6.2.2 (b) Skin protection**

Wear chemically resistant gloves (tested to EN374) in combination with basic employee training. Recommendations: > 8 hours (breakthrough time); Nitrile rubber gloves, thickness > 0.4 mm, VIBOR® > 0.3 mm. If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**6.2.2 (c) Respiratory protection**

Wear suitable respiratory protection: Inhalation - minimum efficiency of 90.0 %.

Respirator conforming to EN149 with Type A filter or better.

Spray application: Filter type: A/F

Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**6.2.3 Environmental exposure controls**

- Daily amount per site = 125 T/day of the mixture
- Treat air emissions to provide a typical removal efficiency of 90%
- Prevent discharge of undissolved substance to or recover from onsite wastewater. Consider technical advances and process upgrades (including automation) for the elimination of releases.
- Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency > 97.2%
- Do not apply industrial sludge to natural soils; Sewage sludge should be incinerated, contained or reclaimed.

\* Text in green is copied from the existing text in section 7/8 of the SDS.