

# LCID Example 2b - Introduction

## 1. Purpose of the example

The purpose of this example is to illustrate how the results of the “example 8” of the REACH Practical Guide<sup>1</sup> can be annexed to a Safety Data sheet (SDS). Like for the example in the guide, only the environmental part is taken into account for this representation. Please note that there is an SDS provided in parallel, which uses exactly the same content, but provides the information in the main part of the SDS.

Be aware that some information has been added to the example (as compared to the guide) in order to improve the usefulness of the resulting SDS to the reader. To that end, PNECs of the Lead Component have been added to section 7.2. However, as there are no PNECs available for the remaining components that are hazardous to the environment, this does not impact the methodology used. Still the backup approach to determine the Lead Compound – using the classification of the components – has been applied.

## 2. Mixture information

### 2.1. Information on the mixture

<b>Composition:</b>	Cyclohexane >= 25 % - <= 50 % n-Hexane >= 1 % - <= 5 % Naphtha, hydrotreated light >= 10 % - <= 25 %
<b>Classification of the mixture:</b>	H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long-lasting effects.
<b>Use of the mixture:</b>	Formulation of consumer products

### 2.2. Hazardous substances entering in the composition of the mixture

Substance	PNEC(s)	CLP classification
<b>Cyclohexane</b>	freshwater: 0.207 mg/L marine water: 0.207 mg/L intermittent release: 0.207 mg/L sediment (freshwater): 3.627 mg/kg sediment (marine water): 3.627 mg/kg soil: 2.99 mg/kg STP: 3.24 mg/L	Aquatic Acute 1 Aquatic Chronic 1 M-factor acute: 1 M-factor chronic: 1 H400, H410
<b>n-Hexane</b>	No PNECs available	Aquatic Chronic 2 H411
<b>Naphtha, hydrotreated light</b>	No PNECs available	Aquatic Chronic 2 H411

<sup>1</sup> REACH Practical Guide on Safe Use Information for Mixtures under REACH – The Lead Component Identification (LCID) Methodology  
<http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/REACH-Practical-Guide-on-Safe-Use-Information-for-Mixtures-under-REACH-The-LCID-Methodology.pdf>

### 3. Outcome of the LCID methodology

<b>Lead component environment:</b>	Cyclohexane
<b>Lead component ozone layer hazard:</b>	N.A. – because no hazard identified
<b>Re-calculated M<sub>safe</sub>:</b>	3945.7 kg/d

### 4. OC and RMM associated to Lead Component for the selected use

In “example 8” of the guide, no explicit Risk Management Measures (RMMs) are provided. To improve the usability of the current exercise, the generic measures stated there (“RM1”, “RM2”, ...) have been replaced by actual RMMs including related efficiencies of those measures. Please note that this is made-up information, which does not necessarily reflect a real situation.

### 5. Consolidated OC/RMM for the mixture

There is no need for consolidation in this example. Like for all cases where the LCID is used to derive safe use information for the environmental part, the Operational Conditions (OCs) and RMMs of the Lead component are transferred to the SDS of the mixture as they are.

# Example 2b - Safety Data Sheet content

## Extract of relevant safe use information derived by application of the LCID methodology

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

#### ExpoInfoAnnex

Chemical name: ABC  
INDEX-Number: 123-456-78-9  
CAS Number: 123-45-6

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Formulation of consumer products

#### 1.3. Details of the supplier of the safety data sheet

Company:  
LCID Ltd  
Europe

Telephone: +xx xxx xx-x  
E-mail address: info@lcid-ltd.com

#### 1.4. Emergency telephone number

International emergency number:  
Telephone: +xx xxx xx-x

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### SECTION 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Aquatic Acute 1  
Aquatic Chronic 1

H400, H410

For the classifications not written out in full in this section the full text can be found in section 16.

#### 2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:

Warning

Hazard Statement:

- H400
- H410
- Very toxic to aquatic life..
- Very toxic to aquatic life with long-lasting effects.

Precautionary Statements (Prevention):

- P273
- Avoid release to the environment.

Precautionary Statements (Disposal):

- P501
- Dispose of contents/container to hazardous or special waste collection point.

### 2.3. Other hazards

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

#### Chemical nature

Liquid material.

### 3.2. Mixtures

Cyclohexane

Content (W/W): $\geq 25\%$ - $\leq 50\%$	Aquatic Acute 1
CAS Number: 110-82-7	Aquatic Chronic 1
EC-Number: 203-806-2	M-factor acute: 1
INDEX-Number: 601-017-00-1	M-factor chronic: 1
	H400, H410

n-Hexane

Content (W/W): $\geq 1\%$ - $\leq 5\%$	Aquatic Chronic 2
CAS Number: 92112-69-1	H411
EC-Number: 295-570-2	

Naphtha, hydrotreated light

Content (W/W):  $\geq 10\%$  -  $\leq 25\%$

CAS Number: 8030-30-6

EC-Number: 232-443-2

INDEX-Number: 649-262-00-3

Aquatic Chronic 2

H411

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## SECTION 4: First-Aid Measures

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## SECTION 5: Fire-Fighting Measures

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## SECTION 6: Accidental Release Measures

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

### 7.2. Conditions for safe storage, including any incompatibilities

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### PNEC

freshwater: 0.207 mg/l

marine water: 0.207 mg/l

intermittent release: 0.207 mg/l

sediment (freshwater): 3.627 mg/kg

sediment (marine water): 3.627 mg/kg

soil: 2.99 mg/kg

STP: 3.24 mg/l

Data refer to the lead component

*Lead compound information*

#### DNEL

No data available

### 8.2. Exposure controls

#### Environmental exposure controls

All appropriate measures must be taken to prevent the release of this product to the environment and to limit the dispersion of any release when it occurs.

Assessment of safe use has been performed for the mixture and the result is attached as an annex to the SDS

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**SECTION 9: Physical and Chemical Properties**

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**SECTION 10: Stability and Reactivity**

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**SECTION 11: Toxicological Information**

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**SECTION 12: Ecological Information**

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**SECTION 13: Disposal Considerations**

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**SECTION 14: Transport Information**

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**SECTION 15: Regulatory Information**

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**SECTION 16: Other Information**

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## Safe use information for mixtures

The LCID methodology has been used to derive safe use information for mixtures based on the information available (including exposure scenarios) for the constituents of the product.

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1. Formulation of consumer products

ERC2

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## 1. Formulation of consumer products

ERC2

### Control of exposure and risk management measures

<b>Contributing exposure scenario</b>	
<b>Use descriptors covered</b>	ERC2: Formulation of preparations
<b>Risk Management Measures</b>	
Treat air emissions to provide a typical removal efficiency of (%)	70 %
Air treatment measures considered suitable are, e.g.	Waste gas treatment by thermal oxidation
Treat wastewater (prior to discharge to STP) to provide the required removal efficiency of (%)	30 %
Wastewater treatment measures considered suitable are, e.g.	Activated Carbon Adsorption
Default values for the capacity of a Sewage Treatment Plant as well as for freshwater and marine dilution have been applied in the risk assessment for the use	
<b>Exposure estimate and reference to its source</b>	
Assessment method	EASY TRA v4.1
Maximum amount of safe use	3.945,7 kg
Risk from environmental exposure is driven by freshwater sediment.	

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