



# SAFETY DATA SHEET

2100 Hard-Hat® Series Finishes

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

### 1.1 Product identifier

**Product name** : 2100 Hard-Hat® Series Finishes  
**Product description** : Aerosol. Paint.  
**Product type** : Aerosol.

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

Identified uses	
Industrial uses Consumer uses Professional uses	
Uses advised against	Reason
None identified.	-

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

Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium  
 Telephone no.: +32 (0) 13 460 200  
 Fax no.: +32 (0) 13 460 201

**e-mail address of person responsible for this SDS** : rpmeurohas@ro-m.com

### 1.4 Emergency telephone number

#### Supplier

**Telephone number** : +44 (0) 207 858 1228  
**Hours of operation** : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aerosol 1, H222, H229  
 Skin Irrit. 2, H315  
 Eye Irrit. 2, H319  
 STOT SE 3, H335  
 STOT RE 2, H373

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.  
 See Section 16 for the full text of the H statements declared above.  
 See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

## SECTION 2: Hazards identification

**Hazard pictograms** :



**Signal word** :

Danger

**Hazard statements** :

Extremely flammable aerosol.  
 Causes serious eye irritation.  
 Causes skin irritation.  
 May cause respiratory irritation.  
 May cause damage to organs through prolonged or repeated exposure.  
 Pressurized container: may burst if heated.

**Precautionary statements**

**General** :

Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

**Prevention** :

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe vapour or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye protection: nitrile rubber gloves and Safety glasses with side shields.

**Response** :

IF ON SKIN: Wash with plenty of soap and water.

**Storage** :

Store locked up. Protect from sunlight and do not expose to temperatures exceeding 50 °C.

**Disposal** :

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** :

xylene (mixture of isomeres)

**Supplemental label elements** :

Contains 2-butanone oxime. May produce an allergic reaction.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** :

Not applicable.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** :

Not applicable.

**Tactile warning of danger** :

Yes, applicable.

**2.3 Other hazards**

**Other hazards which do not result in classification** :

None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** :

Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	

### SECTION 3: Composition/information on ingredients

dimethyl ether	EC: 204-065-8 CAS: 115-10-6 Index: 603-019-00-8	≥50 - <75	F+; R12	Flam. Gas 1, H220	[2]
xylene (mixture of isomeres)	REACH #: 01-2119488216-32 EC: 215-535-7  CAS: 1330-20-7	≥10 - <25	R10  Xn; R20/21, R48/20, R65 Xi; R36/37/38	Flam. Liq. 3, H226  Acute Tox. 4, H312  Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Flam. Liq. 2, H225	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4  CAS: 100-41-4  Index: 601-023-00-4	≥3 - <5	F; R11  Xn; R20, R48/20, R65	Acute Tox. 4, H332  STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Asp. Tox. 1, H304	[1] [2]
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119457273-39  EC: 918-481-9 Index: 649-327-00-6	≥0.2 - <0.3	Xn; R65  R66	Asp. Tox. 1, H304  EUH066	[1] [2]
2-ethylhexanoic acid, zirconium salt	EC: 245-018-1	≥0.2 - <0.3	Repr. Cat. 3; R63	Repr. 2, H361fd (Fertility and Unborn child)	[1] [2]
toluene	CAS: 22464-99-9 REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3  Index: 601-021-00-3	≥0.1 - <0.2	Xi; R38 F; R11  Repr. Cat. 3; R63 Xn; R48/20, R65  Xi; R38 R67	Flam. Liq. 2, H225  Skin Irrit. 2, H315 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Acute Tox. 4, H312	[1] [2]
2-butanone oxime	EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	≥0.1 - <0.2	Carc. Cat. 3; R40 Xn; R21 Xi; R41 R43  <b>See Section 16 for the full text of the R-phrases declared above.</b>	Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 2-butanone oxime. May produce an allergic reaction.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

## SECTION 5: Firefighting measures

**Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

**Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

**Additional information** : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be propelled from a fire at high speed.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

**7.1 Precautions for safe handling** : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the

## SECTION 7: Handling and storage

conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

### Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

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

Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Do not store above the following temperature: 35°C (95°F). Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### Seveso Directive - Reporting thresholds (in tonnes)

#### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P3a: Flammable aerosols containing flammable gases or flammable liquids	150	500

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

## SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
dimethyl ether	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 958 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 766 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
xylene (mixture of isomeres)	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> STEL: 441 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> STEL: 552 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b>  STEL: 850 mg/m <sup>3</sup> , (as turpentine) 15 minutes. Form: Vapour TWA: 566 mg/m <sup>3</sup> , (as turpentine (100 ppm)) 8 hours. Form: Vapour
2-ethylhexanoic acid, zirconium salt	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 10 mg/m <sup>3</sup> , (as Zr) 15 minutes. TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.
toluene	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> STEL: 384 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 191 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

No DNELs/DMELs available.

### PNECs

No PNECs available

## 8.2 Exposure controls

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

### Individual protection measures

## SECTION 8: Exposure controls/personal protection

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields (EN 166).

### Skin protection

#### Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): nitrile rubber (0.5mm).

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Overalls buttoned to the neck and wrist. (EN 1149-1)

**Other skin protection** : 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.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour (Type AX) and particulate filter (EN 140) .

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	: liquid [Aerosol.]
<b>Colour</b>	: Various
<b>Odour</b>	: Hydrocarbon.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: -25°C
<b>Flash point</b>	: Closed cup: -40°C
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Slightly flammable in the presence of the following materials or conditions: shocks and mechanical impacts. In use, may form flammable/explosive vapour-air mixture. Vapour may travel a considerable distance to source of ignition and flash back.
<b>Upper/lower flammability or explosive limits</b>	: Lower: 3% Upper: 18%
<b>Vapour pressure</b>	: 420 kPa [room temperature]
<b>Vapour density</b>	: >1 [Air = 1]
<b>Relative density</b>	: 0.88 to 0.98
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: 350°C
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Explosive properties</b>	: Extremely explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be propelled from a fire at high speed.
<b>Oxidising properties</b>	: Not available.

**9.2 Other information****Aerosol product**

<b>Type of aerosol</b>	: Spray
<b>Heat of combustion</b>	: 17.15 kJ/g

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Stable under recommended storage and handling conditions (see Section 7).
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.

## SECTION 10: Stability and reactivity

- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO<sub>2</sub> and smoke can be generated.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 2-butanone oxime. May produce an allergic reaction.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dimethyl ether	LC50 Inhalation Gas.	Mouse	386 ppm	0.5 hours
	LC50 Inhalation Gas.	Rat	308000 mg/m <sup>3</sup>	1 hours
	LC50 Inhalation Gas.	Rat	164000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	309 g/m <sup>3</sup>	4 hours
xylene (mixture of isomeres)	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Gas.	Rat	6670 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDL <sub>0</sub> Dermal	Rabbit	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	50000 mg/m <sup>3</sup>	2 hours
	LCL <sub>0</sub> Inhalation Vapour	Rat	4000 ppm	4 hours
	LD50 Oral	Rat	3500 mg/kg	-
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	LC50 Inhalation Vapour	Rat	8500 mg/m <sup>3</sup>	4 hours
	toluene	Rat	49 g/m <sup>3</sup>	4 hours
2-butanone oxime	LC50 Inhalation Vapour	Rat	>4416 mg/l	4 hours

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Acute toxicity estimates

Not available.

### Irritation/Corrosion

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene (mixture of isomeres)	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
ethylbenzene	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
toluene	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
2-butanone oxime	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 microliters	-

### Conclusion/Summary

- Skin** : Causes skin irritation.
- Eyes** : Causes serious eye irritation.
- Respiratory** : May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled.

### Sensitisation

#### Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
- Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

#### Conclusion/Summary

- : Based on available data, the classification criteria are not met.

### Carcinogenicity

#### Conclusion/Summary

- : Based on available data, the classification criteria are not met.

### Reproductive toxicity

#### Conclusion/Summary

- : Based on available data, the classification criteria are not met.

### Teratogenicity

#### Conclusion/Summary

- : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene (mixture of isomeres)	Category 3	Not applicable.	Respiratory tract irritation
toluene	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

**SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
xylene (mixture of isomeres)	Category 2	Not determined	Not determined
ethylbenzene	Category 2	Not determined	hearing organs
toluene	Category 2	Not determined	Not determined

**Aspiration hazard**

Product/ingredient name	Result
xylene (mixture of isomeres)	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

**Other information** : Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 9.46 to 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 4.4 to 2970 µg/l Fresh water	Daphnia spec. - Daphnia magna - Neonate	48 hours
	Acute LC50 13.7 to 8780 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 11 to 9090 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 4200 µg/l Fresh water Chronic NOEC 1000 µg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Pseudokirchneriella subcapitata	96 hours 96 hours
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	Acute EC50 >1000 mg/l	Daphnia spec.	4 hours
	Acute IC50 >1000 mg/l	Algae	4 hours
	Acute LC50 >1000 mg/l	Fish	4 hours
toluene	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12.5 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 6 mg/l Fresh water	Daphnia spec. - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 15.5 ppm Marine water	Crustaceans - Palaemonetes pugio - Adult	48 hours
	Acute LC50 5.5 mg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia spec. - Daphnia magna	21 days
2-butanone oxime	Acute EC50 750 mg/l	Daphnia spec.	48 hours
	Acute IC50 83 mg/l	Algae	72 hours
	Acute LC50 843000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

**SECTION 12: Ecological information**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
xylene (mixture of isomeres)	-	90 % - Readily - 5 days	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met. This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene (mixture of isomeres)	-	-	Readily
ethylbenzene	-	-	Readily
hydrocarbons, C10-C13, n-/iso-/ cyclo-alkanes, < 2% aromatics	Fresh water <28 days, 5 to 25°C	80%; < 28 day(s)	Readily
2-butanone oxime	-	-	Readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
dimethyl ether	0,1	-	low
xylene (mixture of isomeres)	3,16	-	low
ethylbenzene	3,2	-	low
toluene	2,6	8,317637711	low
2-butanone oxime	0,59	5,01	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Volatile.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance.

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

## SECTION 13: Disposal considerations

### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Not emptied containers are hazardous waste.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number</b>	UN 1950	UN1950	UN 1950	UN 1950
<b>14.2 UN proper shipping name</b>	AEROSOLS, Flammable [Limited quantity]	AEROSOLS, Flammable [Limited quantity]	AEROSOLS, Flammable [Limited quantity]	AEROSOLS, Flammable
<b>14.3 Transport hazard class(es)</b>	2	2	2.1	2.1 
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.
<b>Additional information</b>	<p><b>Limited quantity:</b> LQ2</p> <p><b>Remarks:</b> (≤ 1L: ) Limited Quantity - ADR/IMDG 3.4</p> <p>ADR Tunnel code: (D)</p>		<p><b>Emergency schedules (EmS):</b> F-D + S-U</p> <p><b>Remarks:</b> Limited Quantity - ADR/IMDG 3.4</p>	<p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 75 kg Packaging instructions: 203</p> <p><b>Cargo Aircraft Only</b> Quantity limitation: 150 kg Packaging instructions: 203</p> <p><b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 30 kg Packaging instructions: Y 203</p>

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## SECTION 14: Transport information

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Other EU regulations

**VOC for Ready-for-Use Mixture** : Not available.

**Europe inventory** : All components are listed or exempted.

**Priority List Chemicals (793/93/EEC)** : Listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
toluene	-	-	Repr. 2, H361d (Unborn child)	-
2-butanone oxime	Carc. 2, H351	-	-	-

**Aerosol dispensers** :

3



Extremely flammable

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

##### Category

P3a: Flammable aerosols containing flammable gases or flammable liquids

#### National regulations

**Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**References** : EH40/2005 Workplace exposure limits  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

#### International regulations

## SECTION 15: Regulatory information

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### Montreal Protocol (Annexes A, B, C, E)

Not listed.

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**CN code** : 3208 10 90

### International lists

#### National inventory

<b>Australia</b>	: At least one component is not listed.
<b>Canada</b>	: At least one component is not listed in DSL but all such components are listed in NDSL.
<b>China</b>	: All components are listed or exempted.
<b>Japan</b>	: At least one component is not listed.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: At least one component is not listed.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.

**15.2 Chemical Safety Assessment** : No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

 Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aerosol 1, H222, H229	Expert judgment
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2, H319	Expert judgment
STOT SE 3, H335	Expert judgment
STOT RE 2, H373	Expert judgment

## SECTION 16: Other information

<b>Full text of abbreviated H statements</b>	: H220 H222, H229  H225 H226 H304 H312 H312 (dermal) H315 H317 H318 H319 H332 (inhalation) H335 H336 H351 H361d (Unborn child) H361fd (Fertility and Unborn child) H373  H373 (hearing organs)	Extremely flammable gas. Extremely flammable aerosol. Pressurized container: may burst if heated. Highly flammable liquid and vapour. Flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful in contact with skin. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging the unborn child. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. (hearing organs)
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<b>Full text of classifications [CLP/GHS]</b>	: Acute Tox. 4, H312 Acute Tox. 4, H332 Aerosol 1, H222, H229 Asp. Tox. 1, H304 Carc. 2, H351 EUH066 Eye Dam. 1, H318  Eye Irrit. 2, H319  Flam. Gas 1, H220 Flam. Liq. 2, H225 Flam. Liq. 3, H226 Repr. 2, H361d (Unborn child) Repr. 2, H361fd (Fertility and Unborn child) Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT RE 2, H373  STOT RE 2, H373 (hearing organs) STOT SE 3, H335  STOT SE 3, H336	ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 AEROSOLS - Category 1 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 Repeated exposure may cause skin dryness or cracking. SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE GASES - Category 1 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 TOXIC TO REPRODUCTION (Unborn child) - Category 2 TOXIC TO REPRODUCTION (Fertility and Unborn child) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
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## SECTION 16: Other information

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.