



# SAFETY DATA SHEET

## 2300 Hard-Hat® Series Marking Sprays

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- Product name and/or code** : 2300 Hard-Hat® Series Marking Sprays
- Manufacturer** : Rust-Oleum Netherlands BV, PO. Box 138, NL-4700 AC Roosendaal, The Netherlands  
NV Martin Mathys, Kolenbergstraat 23, B-3545 Zelem, Belgium
- Emergency phone number** : Rust-Oleum: +31(0)165-593636; Fax +31(0)165-593600  
Martin Mathys: +32(0)13-460200; Fax +32(0)13-460201
- e-Mail address of person responsible for this SDS** : rpmeurohas@ro-m.com
- Product use** : Paint.

### 2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 67/548/EEC and its amendments.

- Classification** : F+; R12  
Xn; R20/21
- Physical/chemical hazards** : Extremely flammable.
- Human health hazards** : Harmful by inhalation and in contact with skin.
- Additional warning phrases** : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Contains 2-butanone oxime. May produce an allergic reaction.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	CAS #	%	EU no.	Classification
dimethyl ether	115-10-6	25 - 50	204-065-8	F+; R12 [2]
xylene (mixture of isomers)	1330-20-7	10 - 25	215-535-7	R10 [1] [2] Xn; R20/21 Xi; R38
See section 16 for the full text of the R-phrases declared above				

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 and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

### 4. FIRST AID MEASURES

#### 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.
- 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. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

## 5. FIRE-FIGHTING MEASURES

- Extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Bursting aerosol containers may be propelled from a fire at high speed. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
- Spill** : Do not allow to enter drains or watercourses. 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 (see section 13). Preferably clean with a detergent. Avoid using solvents. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor 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. Keep container tightly closed. 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 preparation. 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). Comply with the health and safety at work laws.
- Storage** : Store in accordance with local regulations. 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. Keep away from: oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Do not empty into drains.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering measures** : 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 vapors below the OEL, suitable respiratory protection must be worn.

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
dimethyl ether	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 958 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 766 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).
xylene (mixture of isomers)	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin.</b> STEL: 441 mg/m <sup>3</sup> 15 minute(s). STEL: 100 ppm 15 minute(s). TWA: 220 mg/m <sup>3</sup> 8 hour(s). TWA: 50 ppm 8 hour(s).

### Exposure controls/personal protection

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 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 vapor (Type AX) and particulate filter (EN 140) .
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): gloves , nitrile rubber (EN 374)  
*Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. 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.*
- Eye 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 or dusts. Recommended: safety glasses with side-shields (EN 166).
- Skin 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. Recommended: Overalls buttoned to the neck and wrist.
- Other protection** : In confined spaces, use compressed-air or fresh-air respiratory equipment.
- 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Liquid. [Aerosol.]
- Odor** : Hydrocarbon.
- Color** : Depending on productnumber
- Flash point** : Closed cup: -40°C (-40°F)
- Boiling point** : -25°C
- Explosion limits** : Lower: 3%  
Upper: 18%
- Vapor pressure** : 420 kPa (3150,26 mm Hg)
- Vapor density** : >1 [Air = 1]
- Volatility %** : 61 to 70% (w/w)
- Relative density (kg/L)** : 0,89 to 0,99

## 10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

## 11. TOXICOLOGICAL INFORMATION

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Exposure to component solvent vapor 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 preparation 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.

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

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dimethyl ether	LC50 Inhalation Vapor	Rat	309 gm/m <sup>3</sup>	4 hours
xylene (mixture of isomeres)	LC50 Inhalation Gas.	Rat	308000 mg/m <sup>3</sup>	1 hours
	LC50 Inhalation Gas.	Mouse	386 ppm	0.5 hours
	LD50 Intraperitoneal	Rat	2459 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Subcutaneous	Rat	1700 mg/kg	-
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours

**12. ECOLOGICAL INFORMATION**

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

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

**Aquatic ecotoxicity**

Ingredient name	Result	Species	Exposure
xylene (mixture of isomeres)	Acute LC50 13500 to 19200 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 0.9 g	96 hours
	Acute LC50 13400 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 18.4 mm - 0.077 g	96 hours
	Acute LC50 13500 to 16100 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1.1 g	96 hours

**Ecological information****Biodegradability**

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

**Conclusion/Remark** : Not available.

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene (mixture of isomeres)	-	-	Readily

**Bioaccumulative potential**

Ingredient name	LogP <sub>ow</sub>	BCF	Potential
dimethyl ether	0.1	-	low
xylene (mixture of isomeres)	3.2	-	high

**13. DISPOSAL CONSIDERATIONS**

Do not allow to enter drains or watercourses.  
Dispose of according to all federal, state and local applicable regulations.


**European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is: 20 01 27\* paint, inks, adhesives and resins containing dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

**Hazardous waste** : Yes.

**14. TRANSPORT INFORMATION**


**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.

**International transport regulations**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	1950 LQ	AEROSOLS, flammable [Limited quantity]	-	-		<b>Limited quantity:</b> LQ2  <b>Remarks:</b> Limited Quantity - ADR/IMDG 3.4  ADR Tunnel Restriction Code: (D)
<b>IMDG Class</b>	1950 LQ	AEROSOLS, flammable [Limited quantity]	2.1	-		<b>Emergency schedules (EmS):</b> F-D + S-U  <b>Remarks:</b> Limited Quantity - ADR/IMDG 3.4  <b>Marine pollutant</b> : NO
<b>IATA Class</b>	1950	AEROSOLS, flammable	2.1	-		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 75 kg Packaging instructions: 203 <b>Cargo Aircraft Only</b> Quantity limitation: 150 kg Packaging instructions: 203 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 30 kg Packaging instructions: Y 203

PG\* : Packing group

**15. REGULATORY INFORMATION**

- EU regulations** : The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:
- Hazard symbol or symbols** : 
- Extremely flammable, Harmful
- Risk phrases** : R12- Extremely flammable.  
R20/21- Harmful by inhalation and in contact with skin.
- Safety phrases** : S2- Keep out of the reach of children.  
S23- Do not breathe vapor or spray.  
S36/37- Wear suitable protective clothing and gloves.  
S51- Use only in well-ventilated areas.  
S56- Dispose of this material and its container at hazardous or special waste collection point.
- Contains** : xylene (mixture of isomeres)
- Europe inventory** : All components are listed or exempted.
- Other EU regulations**
- Additional warning phrases** : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Contains 2-butanone oxime. May produce an allergic reaction.
- Tactile warning of danger** : Yes, applicable.
- CN code** : 3208 10 90

**16. OTHER INFORMATION**

- Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : R12- Extremely flammable.  
R10- Flammable.  
R20/21- Harmful by inhalation and in contact with skin.  
R38- Irritating to skin.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

☑ Indicates information that has changed from previously issued version.

**Notice to reader**

*The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties. ©Copyright by Rust-Oleum Netherlands B.V. / Martin Mathys B.V.*

An **RPM** Company

<b>Version</b>	0.06	v.4.0.	Page: 5/5
<b>Date of issue</b>	5/08/2009.		Printed 20/05/2010.