RUST-OLEUM MATHYS

best solutions in paints & coatings

PRODUCT DATA

HARD HAT® AEROSOLS TOPCOATS 2100

DESCRIPTION

RUST-OLEUM® Hard Hat Aerosol Topcoats 2100 are based on a fast drying short oil soya alkyd. The products are based on lead- and chromate free pigments.

RECOMMENDED USES

RUST-OLEUM Topcoats 2100 should be applied over RUST-OLEUM Hard Hat 2169/2182 Primers or properly prepared painted substrates.

RUST-OLEUM Topcoats 2100 are intended for small maintenance jobs or for touch-up. RUST-OLEUM Topcoats 2100 should be used in light industrial exposures, normal humidity and interior applications.

TECHNICAL DATA

Appearance: High gloss, 2190 and 2178 are flat

Colour: See colour card Propellant: Dimethyl ether

Recommended film thickness: 25 µm dry, equals averagely 100 µm wet

VOC-content: 640 - 650 g/l

Drying times20°C/50% r.v.To touch:15 minutesTo handle:30 minutes

To recoat: Within 1 hour or after 48 hours

Full hardness 7 days

Heat resistance: 100°C (dry heat), above 65°C discoloration may occur

Coverage

Theoretical: 2.5 m² per spray can at 25 µm dry

Practical: Practical coverage depends on many factors such as porosity and

roughness of the substrate and material losses during application.

SURFACE PREPARATION

Remove dirt, grease, oil, loose rust and all other surface contaminants by appropriate means. Prime or spot prime with the recommended RUST-OLEUM Primers. Sand intact coatings to provide a proper key for adhesion. The surface must be clean and dry during application.

DIRECTION FOR USE

Remove cover cap. Shake vigorously for at least one minute after the rattle of mixing ball is heard. Shake frequently during use.

Hold can approx. 25 cm from surface. Use back and forth motion keeping can parallel with surface. Ensure that can is in motion when spray button is pressed to avoid runs and sags. Apply several thin layers at a few minutes interval to achieve adequate coating thickness. After use turn can upside down and press spray button for 2 - 3 seconds to clean valve.

APPLICATION CONDITIONS

For good results the relative humidity shall be below 85% and the temperature of the can above and substrate 0°C.

REMARKS

Bright topcoats may need a light coloured primer/intermediate coat.

Page: 1 / 2 - Ver. 02 PDS 2100 Topcoats-gb Issued: 22-12-08 The information contained herein is given in good faith. However, since application conditions are beyond our control, Rust-Oleum Netherlands B.V. cannot assume responsibility for any risks or liabilities which may result from the use of these products. The company reserves the right to modify data without prior notice.

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PRODUCT DATA

HARD HAT® AEROSOLS TOPCOATS 2100

SAFETY

Consult Safety Data Sheet and Safety Information printed on the can.

SHELLIFE / STORAGE CONDITIONS

5 years from date of production in unopened cans, if stored in dry, well ventilated areas, not in direct sunlight at temperatures between 5° and 35°C.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010 - United Kingdom (UK)



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

Not applicable.

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

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]

Flam. Aerosol 1, H222 Skin Irrit. 2, H315

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F+; R12

Xn; R20/21 Xi; R38

Physical/chemical : Extremely flammable.

hazards

Human health hazards : Harmful by inhalation and in contact with skin. Irritating to skin.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

2100 Hard-Hat® Series Finishes

SECTION 2: Hazards identification

Hazard pictograms





Signal word : Danger

Hazard statements: Extremely flammable aerosol.

Causes skin irritation.

Precautionary statements

General : Read label before use. If medical advice is needed, have product container or label

at hand.

Prevention : Do not spray on an open flame or other ignition source. Wear protective gloves and

eye protection: gloves: nitrile rubber - Safety glasses with side shields.

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

Storage :

Disposal : Not applicable.

Supplemental label

elements

: Pressurized container: may burst if heated. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight and do not expose to temperatures

exceeding 50 °C. Keep out of reach of children.

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

Special packaging requirements

Containers to be fitted

with child-resistant

fastenings

: Not applicable.

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

			<u>Classification</u>		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
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 Index: 601-022-00-9	25 - <35	R10 Xn; R20/21 Xi; R38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	[1] [2]
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119457273-39 EC: 918-481-9 Index: 649-327-00-6	<10	Xn; R65 R66	Asp. Tox. 1, H304	[1] [2]
2-ethylhexanoic acid,	EC: 245-018-1	0,2 -	Repr. Cat. 3; R63	Repr. 2, H361fd	[1] [2]

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SECTION 3: Composition/information on ingredients

| Zirconium salt | CAS: 22464-99-9 | <0,5 | Xi; R38 |
| See Section 16 for the full text of the R-phrases declared above. | See Section 16 for the statements 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, are PBTs or vPvBs 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: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

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. 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. 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.

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)

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO₂, 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.

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

: Do not allow to enter drains or watercourses. If the product contaminates lakes. rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

: 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.

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

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 conducting type.

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SECTION 7: Handling and storage

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.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
dimethyl ether	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 958 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 766 mg/m³ 8 hours.
xylene (mixture of isomeres)	TWA: 400 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.
	STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m³, (as turpentine) 15 minutes. Form: Vapour TWA: 566 mg/m³, (as turpentine (100 ppm)) 8 hours. Form: Vapour

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SECTION 8: Exposure controls/personal protection

2-ethylhexanoic acid, zirconium salt

EH40/2005 WELs (United Kingdom (UK), 12/2011).

STEL: 10 mg/m³, (as Zr) 15 minutes.

TWA: 5 mg/m³, (as Zr) 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

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

Skin protection

Hand protection

: Safety glasses with side shields. (EN166)

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: nitrile rubber.

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.

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SECTION 8: Exposure controls/personal protection

Body protection

: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (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

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

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

: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. (Aerosol.)

Colour : Various

Odour : Hydrocarbon.
pH : Not available.
Melting point/freezing point : Not available.

Initial boiling point and

boiling range

: -25°C

Flash point : Closed cup: -40°C Evaporation rate : Not available.

Flammability (solid, gas)

: 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.

Burning time : Not applicable.

Burning rate : Not applicable.

Upper/lower flammability or explosive limits : Lower: 3%

Upper: 18%

Vapour pressure : 420 kPa [room temperature]

Vapour density : >1 [Air = 1]

Relative density : 0,88 to 0,98

Solubility(ies) : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature : 350°C

Decomposition temperature : Not available.

Viscosity : Not available.

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SECTION 9: Physical and chemical properties

Explosive properties

: 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.

Oxidising properties

: Not available.

9.2 Other information

Type of aerosol : Spray

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

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, CO2 and

smoke can be generated.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. 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.

Acute toxicity

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: Not available.

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SECTION 11: Toxicological information

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 ³	1 hours
	LC50 Inhalation Gas.	Rat	164000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	309 g/m³	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	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
hydrocarbons, C10-C13, n-/	LC50 Inhalation Vapour	Rat	8500 mg/m ³	4 hours
iso-/ cyclo-alkanes, < 2%				
aromatics				
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-

Conclusion/Summary

Acute toxicity estimates

Not available.

Irritation/Corrosion

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	
	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	100 Percent	-

Conclusion/Summary

Skin : Causes skin irritation.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Other information : Not available.

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SECTION 12: Ecological information

12.1 Toxicity

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

Product/ingredient name	Result	Species	Exposure
hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Acute EC50 >1000 mg/l	Daphnia spec.	4 hours
	Acute IC50 >1000 mg/l Acute LC50 >1000 mg/l	Algae Fish	4 hours 4 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

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

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene (mixture of isomeres) hydrocarbons, C10-C13, n-/ iso-/ cyclo-alkanes, < 2% aromatics			Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
dimethyl ether	0,1	-	low
xylene (mixture of isomeres)	3,16	-	low

12.4 Mobility in soil

Soil/water partition

: Not available.

coefficient (Koc)

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

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.

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SECTION 13: Disposal considerations

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.

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.

Type of packaging	European waste catalogue (EWC)
Spraycans	20 01 22 spraycans

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

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SECTION 14: Transport information

user

14.6 Special precautions for : 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 15: Regulatory information

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

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.

: 3208 10 90

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 : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Other EU regulations

VOC for Ready-for-Use

Mixture

: Not available.

Europe inventory : Not determined.

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-ethylhexanoic acid, zirconium salt	-	-	Repr. 2, H361d	Repr. 2, H361f

Aerosol dispensers

Extremely flammable

National regulations

15.2 Chemical Safety **Assessment**

: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: 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

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SECTION 16: Other information

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification	
	Expert judgment Expert judgment	

Full text of abbreviated H

statements

H220 Extremely flammable gas.H222 Extremely flammable aerosol.H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Full text of classifications [CLP/GHS]

: Acute Tox. 4, H312

ACUTE TOXICITY: SKIN - Category 4

Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4

Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1
Flam. Aerosol 1, H222 FLAMMABLE AEROSOLS - Category 1
Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3

Repr. 2, H361fd TOXIC TO REPRODUCTION [Fertility and Unborn child]

- Category 2

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2

Full text of abbreviated R

phrases

: R12- Extremely flammable.

R10- Flammable.

R63- Possible risk of harm to the unborn child.
R20/21- Harmful by inhalation and in contact with skin.
R65- Harmful: may cause lung damage if swallowed.

R38- Irritating to skin.

R66- Repeated exposure may cause skin dryness or cracking.

Full text of classifications

[DSD/DPD]

: F+ - Extremely flammable

Repr. Cat. 3 - Toxic to reproduction category 3

Xn - Harmful Xi - Irritant : 23/09/2014.

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Version

Notice to reader

Date of printing

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 fulfil 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.

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