

SAFETY DATA SHEET

2400 Hard-Hat® Anti-Slip

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

1.1 Product identifier

Product name : 2400 Hard-Hat® Anti-Slip

Product description : Aerosol. Paint.

Product type : Aerosol.

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Rust-Oleum Netherlands BV, PO. Box 138, NL-4700 AC Roosendaal, The Netherlands

Telephone: +31 (0) 165 593 636 Fax no.: +31 (0) 165 593 600

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

National advisory body/Poison Center

Telephone number : +44 (0) 207 858 1228

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

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

R66, R67 R52/53

Physical/chemical

hazards

: Extremely flammable.

Human health hazards : Repeated exposure may cause skin dryness or cracking. Vapors may cause

drowsiness and dizziness.

Environmental hazards: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

See Section 16 for the full text of the R-phrases declared above.

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

2.2 Label elements

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SECTION 2: Hazards identification

Hazard symbol or symbols



Indication of danger

Risk phrases

: Extremely flammable

R12- Extremely flammable.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapors may cause drowsiness and dizziness.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety phrases

S2- Keep out of the reach of children. S23- Do not breathe vapor or spray.

S24- Avoid contact with skin.

S51- Use only in well-ventilated areas.

S56- Dispose of this material and its container at hazardous or special waste

collection point.

Supplemental label

elements

: 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.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger: Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : Not available.

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
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01- 2119471843-32 EC: 927-241-2 CAS: 64742-48-9 Index: 649-327-00-6	20-25	R10 Xn; R65 R66, R67 R52/53	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
butane	EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	20-25	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
acetone	EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	5-10	F; R11 Xi; R36 R66, R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
hydrocarbons, C7-C9, n-/ iso-/ cyclo-alkanes	REACH #: 01- 2119473851-33	<10	Xn; R65	Flam. Liq. 2, H225	[1] [2]
	EC: 920-750-0 CAS: 64742-49-0 Index: 649-328-00-1		R66, R67	STOT SE 3, H336i Asp. Tox. 1, H304 Aquatic Chronic 2, H411	
			See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.	

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SECTION 3: Composition/information on ingredients

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

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

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.

Ingestion : If swallowed, seek medical advice immediately and show this 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 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.

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)

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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

: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. 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 vapor 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 Section 8 for additional information on hygiene measures.

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). Do not allow to enter drains or watercourses. 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.

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 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.

Operators should wear antistatic footwear and clothing and floors should be of the 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 preparation. Avoid inhalation of dust from

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SECTION 7: Handling and storage

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.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors 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 vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have 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: oxidizing 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 unauthorized 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
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m³, (as turpentine (150 ppm)) 15 minute(s). Form: Vapor TWA: 566 mg/m³, (as turpentine (100 ppm)) 8 hour(s). Form: Vapor
butane	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 1810 mg/m³ 15 minute(s). STEL: 750 ppm 15 minute(s). TWA: 1450 mg/m³ 8 hour(s). TWA: 600 ppm 8 hour(s).
acetone	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 3620 mg/m³ 15 minute(s). STEL: 1500 ppm 15 minute(s). TWA: 500 ppm 8 hour(s). TWA: 1210 mg/m³ 8 hour(s).
hydrocarbons, C7-C9, n-/ iso-/ cyclo-alkanes	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m³, (as turpentine (150 ppm)) 15 minute(s). Form: Vapor TWA: 566 mg/m³, (as turpentine (100 ppm)) 8 hour(s). Form: Vapor

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SECTION 8: Exposure controls/personal protection

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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	DNEL	Long term Dermal	300 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1500 mg/m³	Workers	Systemic
	DNEL	Long term Oral, Dermal	300 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	900 mg/m³	Consumers	Systemic

Predicted effect concentrations

No PECs 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 vapors 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)

: 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.

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. Recommended: disposable overall (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.

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 A) and particulate filter (EN 140).

Environmental exposure controls

: Do not allow to enter drains or watercourses.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Spraycans]

Color : Various
Odor : Solvent-like.
Odor threshold : Not available.
pH : Not available.
Melting point/freezing point : <-90°C

Initial boiling point and boiling

range

: Not available.

Flash point : Closed cup: -70°C Evaporation rate : >1 (butyl acetate = 1)

Flammability (solid, gas) : Highly 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 vapor-air mixture. Vapor 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: 2%

Upper: 9%

Vapor pressure : 400 kPa [20°C] Vapor density : >1 [Air = 1] Relative density : 0,7 to 0,75

Solubility(ies) : Soluble in the following materials: acetone.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Explosive properties : Highly explosive in the presence of the following materials or conditions: open

flames, sparks and static discharge and heat.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be

propelled from a fire at high speed.

Oxidizing properties : Not available.

9.2 Other information

Aerosol product

hazardous reactions

Type of aerosol : Spray

Heat of combustion : 0.002231 kJ/g

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

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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: oxidizing 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 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.

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
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	LC50 Inhalation Vapor	Rat	>5000 mg/m³	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>15000 mg/kg	-
butane	LC50 Inhalation Gas.	Rat	658000 mg/m3	4 hours
acetone	LD50 Oral	Rat	5800 mg/kg	-
hydrocarbons, C7-C9, n-/ iso-/ cyclo-alkanes	LC50 Inhalation Vapor	Rat	>50 mg/L	4 hours
•	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary

: Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Skin - Edema	Rabbit	1	-	-
	Eyes - Cornea opacity	Rabbit	0	-	-
acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	_	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	_	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395	-

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SECTION 11: Toxicological information

milligrams

Conclusion/Summary

: Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	skin	Rabbit	Not sensitizing

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Negative - Oral - TD	Rat	-	-

Conclusion/Summary: Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	-	-	Negative	Rat - Female	Oral	-

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are 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 classified for eco-toxicological properties accordingly. See sections 3 and 15 for details.

Result	Species	Exposure
Acute EC50 >1000 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
Acute EC50 22 to 46 mg/l	Daphnia spec.	48 hours
Acute LC50 10 to 30 mg/l	Fish	96 hours
Acute NOEC <1 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
Acute EC50 5600 to 10000 mg/l Fresh water	Algae - Selenastrum sp.	72 hours
Acute EC50 20.565 mg/L Marine water	Algae - Ulva pertusa	96 hours
Acute LC50 8800 mg/l Fresh water	Daphnia spec Daphnia pulex - <24 hours	48 hours
Acute LC50 7280 to 7880 mg/l Fresh water	Fish - 28 days - 19.2 mm - 0.076	96 hours
Acute LC50 5600 ppm Fresh water	Fish - 4 to 12 months - 2 to 10 cm	96 hours
Acute LC50 5.54 to 6.33 ml/L Fresh water	Fish - 1 g	96 hours
	Acute EC50 >1000 mg/l Acute EC50 22 to 46 mg/l Acute LC50 10 to 30 mg/l Acute NOEC <1 mg/l Acute EC50 5600 to 10000 mg/l Fresh water Acute EC50 20.565 mg/L Marine water Acute LC50 8800 mg/l Fresh water Acute LC50 7280 to 7880 mg/l Fresh water Acute LC50 5600 ppm Fresh water Acute LC50 5600 ppm Fresh water Acute LC50 5.54 to 6.33 ml/L Fresh	Acute EC50 >1000 mg/l Acute EC50 22 to 46 mg/l Acute LC50 10 to 30 mg/l Acute NOEC <1 mg/l Acute EC50 5600 to 10000 mg/l Fresh water Acute EC50 20.565 mg/L Marine water Acute LC50 8800 mg/l Fresh water Acute LC50 7280 to 7880 mg/l Fresh water Acute LC50 5600 ppm Fresh water Acute LC50 554 to 6.33 ml/L Fresh Algae - Pseudokirchneriella subcapitata Algae - Selenastrum sp. Algae - Selenastrum sp. Fish - 28 days - 19.2 mm - 0.076 g Fish - 4 to 12 months - 2 to 10 cm Fish - 1 g

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SECTION 12: Ecological information

	Chronic NOEC 1 g/L Fresh water	Daphnia spec Daphnia magna	21 days
		- <=24 hours	
1	Acute EC50 4.6 to 10 mg/l	Daphnia spec.	96 hours
iso-/ cyclo-alkanes			
	Acute IC50 10 to 30 mg/l	Algae	72 hours
	Acute LC50 3 to 10 mg/l	Fish	96 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	-	89 % - Readily - 28 days	-	-
hydrocarbons, C7-C9, n-/iso-/ cyclo-alkanes	-	97.5 % - Readily - 28 days	-	-

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Fresh water <28 days	-	Readily
acetone hydrocarbons, C7-C9, n-/ iso-/ cyclo-alkanes	- Fresh water <28 days	-	Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
hydrocarbons, C9-C10, n-/ iso-/ cyclo-alkanes, < 2% aromatics	3.9 to 4.9	-	high
butane	2.89	-	low
propane	2.36	-	low
acetone	-0.27 to 0.58	-	low
hydrocarbons, C7-C9, n-/ iso-/ cyclo-alkanes	3.9 to 4.9	-	high

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: 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

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

13.1 Waste treatment methods

Product

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SECTION 13: Disposal considerations

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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.

Hazardous waste

European waste catalogue (EWC)

Yes

: 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.

Packaging

Methods of disposal

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

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	1950 LQ	1950 LQ	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.	
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.	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.	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.	
Additional information	Limited quantity: LQ2 Remarks: (≤ 5L:) 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	

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2400 Hard-Hat® Anti-Slip
SECTION 14: Transport information

Packaging instructions: 203

Limited Quantities Passenger Aircraft
Quantity limitation:
30 kg
Packaging
instructions: Y 203

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not available.

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.

CN code : 3208 10 90

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

Annex XIV - List of substances subject to authorization

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 : Not available.

Mixture

Europe inventory : All components are listed or exempted.

Black List Chemicals : Not listed Priority List Chemicals : Not listed

Aerosol dispensers :

3

70.24% by mass of the contents are flammable.

Product/ingredient name	List name	Name on list	Classification	Notes
	UK Occupational Exposure Limits EH40 - WEL	butane	Carc.	-

15.2 Chemical Safety Assessment

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

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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]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

Full text of abbreviated H statements

: H220 Extremely flammable gas. H225 Highly flammable liquid and vapor. H226 Flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness. H336i May cause drowsiness and dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

: Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2 Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3

Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1

Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Gas 1, H220 FLAMMABLE GASES - Category 1 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3

Press. Gas Comp. Gas, GASES UNDER PRESSURE - Compressed gas

H280

SPECIFIC TARGET ORGAN TOXICITY (SINGLE **STOT SE 3, H336**

EXPOSURE) [Narcotic effects] - Category 3

STOT SE 3, H336i SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE): INHALATION [Narcotic effects] - Category

Full text of abbreviated R

phrases

: R12- Extremely flammable.

R11- Highly flammable.

R10- Flammable.

R65- Harmful: may cause lung damage if swallowed.

R36- Irritating to eyes.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapors may cause drowsiness and dizziness.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Full text of classifications [DSD/DPD]

: F+ - Extremely flammable F - Highly flammable

Xn - Harmful Xi - Irritant

Company

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revision

Date of previous issue : No previous validation.

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. © Rust-Oleum Netherlands B.V. / Martin Mathys N.V.

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