



# SAFETY DATA SHEET

9700 Coldmax Rapid® Base Wintergrade

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

### 1.1 Product identifier

**Product name** : 9700 Coldmax Rapid® Base Wintergrade  
**Product description** : Floorcoating. Paint.  
**Product type** : Liquid.

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

Identified uses	
Industrial uses Professional uses	
Uses advised against	Reason
Consumer use	Product is not intended for consumer use.

### 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]

Flam. Liq. 3, H226  
 Skin Sens. 1, H317  
 STOT RE 2, H373 (inhalation)  
 Aquatic Chronic 3, H412


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

<b>Hazard pictograms</b>	:	
<b>Signal word</b>	:	Warning
<b>Hazard statements</b>	:	Flammable liquid and vapour. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure if inhaled. Harmful to aquatic life with long lasting effects.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	:	P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P280 - Wear protective gloves: - neoprene gloves P260 - Do not breathe vapour. P273 - Avoid release to the environment.
<b>Response</b>	:	P302 - IF ON SKIN: P352 - Wash with plenty of soap and water. P333 - If skin irritation or rash occurs: P313 - Get medical attention.
<b>Storage</b>	:	P403 - Store in a well-ventilated place. P235 - Keep cool.
<b>Disposal</b>	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	:	tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-di-aspartate bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane quartz, respirable fraction 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate pentamethyl-4-piperidyl sebacate methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
<b>Supplemental label elements</b>	:	Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	:	Not applicable.
<b><u>Special packaging requirements</u></b>		
<b>Containers to be fitted with child-resistant fastenings</b>	:	Not applicable.
<b>Tactile warning of danger</b>	:	Not applicable.
<b>2.3 Other hazards</b>		
<b>Other hazards which do not result in classification</b>	:	None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

### SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	
			Regulation (EC) No. 1272/2008 [CLP]	Type
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	REACH #: 01-0000017556-46 CAS: 136210-30-5 Index: 607-521-00-8	≥10 - <25	Skin Sens. 1, H317  Aquatic Chronic 3, H412	[1]
bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl) methane	REACH #: 01-0000015937-58 EC: 412-060-9 CAS: 136210-32-7 Index: 607-350-00-9	≥10 - <25	Skin Sens. 1, H317  Aquatic Chronic 3, H412	[1]
quartz, respirable fraction	EC: 238-878-4 CAS: 14808-60-7	≥5 - <10	STOT RE 1, H372 (respiratory tract) (inhalation)	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥5 - <10	Flam. Liq. 3, H226	[2]
1,6-hexanediy-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl) carbamate	EC: 411-700-4 CAS: 140921-24-0 Index: 616-079-00-5	≥1 - <3	Skin Sens. 1, H317	[1]
diethyl fumarate	EC: 210-819-7 CAS: 623-91-6	≥1 - <3	Acute Tox. 4, H302	[1]
pentamethyl-4-piperidyl sebacate	REACH #: 01-2119491304-40 EC: 255-437-1 CAS: 41556-26-7	≥1 - <3	Skin Sens. 1A, H317  Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	EC: 280-060-4 CAS: 82919-37-7	≥0.3 - <1	Skin Sens. 1A, H317  Aquatic Acute 1, H400 Aquatic Chronic 1, H410 <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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 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 tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate, bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane, 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate, pentamethyl-4-piperidyl sebacate, methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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

## SECTION 5: Firefighting measures

- 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** : No unusual hazard if involved in a fire.

## 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

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### 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.

### 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. 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.

#### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000

### 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

Product/ingredient name	Exposure limit values
quartz, respirable fraction	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 0,1 mg/m <sup>3</sup> 8 hours. Form: respirable dust
2-methoxy-1-methylethyl acetate	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> STEL: 548 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.

**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 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**

Product/ingredient name	Type	Exposure	Value	Population	Effects
tetraethylN,N'-(methylene)dicyclohexane-4,1-diyl) bis-dl-aspartate	DNEL	Long term Oral, Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	28 mg/m <sup>3</sup>	Workers	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	275 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	153.5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	54.8 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	1.67 mg/m <sup>3</sup>	Consumers	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
tetraethylN,N'-(methylene)dicyclohexane-4,1-diyl) bis-dl-aspartate	Fresh water	0.00013 mg/l	-
	Marine	0.000013 mg/l	-
	Fresh water sediment	0.21 mg/kg dwt	-
	Marine water sediment	0.02 mg/kg dwt	-
	Soil	0.1 mg/kg dwt	-
	Sewage Treatment Plant	31.1 mg/l	-
2-methoxy-1-methylethyl acetate	Secondary Poisoning	66.67 mg/kg	-
	Fresh water	0.635 mg/l	-
	Fresh water sediment	3.29 mg/kg	-
	Marine water sediment	0.329 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewage Treatment Plant	100 mg/l	-

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## SECTION 8: Exposure controls/personal protection

**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 or dusts.

### 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): neoprene (0.65mm)

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. Recommended: Wear overalls or long sleeved shirt. (EN 467)

**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 A) and particulate filter (EN 141)

**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.
<b>Colour</b>	: Various
<b>Odour</b>	: Not available.
<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>	: Not available.
<b>Flash point</b>	: Closed cup: 42°C
<b>Evaporation rate</b>	: Not available.



## SECTION 9: Physical and chemical properties

<b>Flammability (solid, gas)</b>	: Not available.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 1,65
<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>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

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.
<b>10.4 Conditions to avoid</b>	: When exposed to high temperatures may produce hazardous decomposition products.
<b>10.5 Incompatible materials</b>	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
<b>10.6 Hazardous decomposition products</b>	: 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.

**SECTION 11: Toxicological information**

Contains tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate, bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane, 1,6-hexanediy-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate, pentamethyl-4-piperidyl sebacate, methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	LC50 Inhalation Dusts and mists	Rat	>4224 mg/m <sup>3</sup>	4 hours
2-methoxy-1-methylethyl acetate	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Vapour	Rat	4345 mg/l	6 hours
diethyl fumarate pentamethyl-4-piperidyl sebacate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
	LD50 Oral	Rat	1780 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

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

**Acute toxicity estimates**

Not available.

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	Skin - Mild irritant	Rabbit	-	-	-
	Eyes - Redness of the conjunctivae	Rabbit	1	-	-
pentamethyl-4-piperidyl sebacate	Skin - Oedema	Rabbit	0	-	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Skin - Oedema	Rabbit	0	-	-

**Conclusion/Summary**

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

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

**Respiratory** : May cause damage to organs through prolonged or repeated exposure if inhaled.

**Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	skin	Guinea pig	Sensitising
pentamethyl-4-piperidyl sebacate	skin	Guinea pig	Sensitising
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	skin	Guinea pig	Sensitising

**Conclusion/Summary**

**Skin** : May cause an allergic skin reaction.

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

**SECTION 11: Toxicological information****Mutagenicity**

Product/ingredient name	Test	Experiment	Result
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	OECD 471	Experiment: In vitro	Negative
	OECD 473	Subject: Bacteria Experiment: In vitro	Negative
pentamethyl-4-piperidyl sebacate	OECD 471	Subject: Mammalian-Animal Experiment: In vitro	Negative
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	OECD 471	Subject: Bacteria Experiment: In vitro	Negative
		Subject: Bacteria	

**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)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
quartz, respirable fraction	Category 1	Inhalation	respiratory tract

**Aspiration hazard**

Not available.

**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 classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	Acute EC50 88.6 mg/l	Daphnia spec.	48 hours
	Acute IC50 113 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute LC50 66 mg/l	Fish	96 hours
2-methoxy-1-methylethyl acetate	Chronic NOEC 0.01 mg/l	Daphnia spec.	21 days
	Acute EC50 408 to 500 mg/l	Daphnia spec.	48 hours
	Acute LC50 161 mg/l	Fish	96 hours
diethyl fumarate	Acute LC50 100 to 180 mg/l	Fish	96 hours
	Acute LC50 4500 µg/l Fresh water	Fish - Pimephales promelas	96 hours

## SECTION 12: Ecological information

pentamethyl-4-piperidyl sebacate	Acute EC50 1.68 mg/l Acute EC50 >100 mg/l Acute EC50 20 mg/l Acute LC50 0.97 mg/l Acute LC50 7.9 mg/l Chronic NOEC 1 mg/l Acute EC50 1.68 mg/l	Aquatic plants - Desmodemus subspicatus Bacteria Daphnia spec. Fish Fish Daphnia spec. Aquatic plants - Desmodemus subspicatus	72 hours 3 hours 24 hours 96 hours 96 hours 21 days 72 hours
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Acute EC50 >100 mg/l Acute EC50 20 mg/l Acute LC50 0.97 mg/l Acute LC50 7.9 mg/l Chronic NOEC 1 mg/l	Bacteria Daphnia spec. Fish Fish Daphnia spec.	3 hours 24 hours 96 hours 96 hours 21 days

**Conclusion/Summary** : Harmful to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	OECD 301F	13 % - Not readily - 28 days	-	-
	OECD 302C	0 % - Not readily - 28 days	-	-
pentamethyl-4-piperidyl sebacate	OECD 301F	38 % - Not readily - 28 days	-	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	OECD 301F	38 % - Not readily - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	Fresh water 28 days, pH 4, 25°C (OECD 111) Fresh water 1 days, pH 7, 25°C (OECD 111) Fresh water 0.7 days, pH 9, 25°C (OECD 111)	-	Not readily
bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane	-	-	Not readily
2-methoxy-1-methylethyl acetate	-	-	Readily
pentamethyl-4-piperidyl sebacate	-	-	Not readily
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	-	-	Not readily

### 12.3 Bioaccumulative potential

**SECTION 12: Ecological information**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	5,16	1872	high
bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane	-	8228	high
2-methoxy-1-methylethyl acetate	0,43	-	low
pentamethyl-4-piperidyl sebacate	2.4 to 2.8	-	low
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	2.4 to 2.8	-	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.

**European waste catalogue (EWC)**

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

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other 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.

## SECTION 13: Disposal considerations

- 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number</b>	Not regulated.	Not regulated.	UN 1263	UN 1263
<b>14.2 UN proper shipping name</b>	-	-	Paint.	Paint.
<b>14.3 Transport hazard class(es)</b>	-	-	3	3 
<b>14.4 Packing group</b>	-		III	III
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.
<b>Additional information</b>	Exempted according to 2.2.3.1.5 (Viscous substance exemption) This class 3 material can be considered non hazardous in packagings up to 450 L.		<b>Emergency schedules (EmS):</b> F-E + S-E  <b>Viscous substance exemption</b> This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption)	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 60 L Packaging instructions: 355 <b>Cargo Aircraft Only</b> Quantity limitation: 220 L Packaging instructions: 366 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 10 L Packaging instructions: Y 344

- 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 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** : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

**VOC for Ready-for-Use Mixture** : 2004/42/EC - IIA/j: 500g/l (2010). <= 99g/l VOC.

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

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

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

Category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

#### 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

##### 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** : 3824 90 70

#### International lists

#### National inventory

## SECTION 15: Regulatory information

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Japan</b>	: Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>United States</b>	: Not determined.

**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.

### 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
: vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Liq. 3, H226	Expert judgment
Skin Sens. 1, H317	Expert judgment
STOT RE 2, H373 (inhalation)	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

### Full text of H-phrases referred to in sections 2 and 3

#### Full text of abbreviated H statements

: H226	Flammable liquid and vapour.
: H302	Harmful if swallowed.
: H317	May cause an allergic skin reaction.
: H372 (respiratory tract) (inhalation)	Causes damage to organs through prolonged or repeated exposure if inhaled. (respiratory tract)
: H373 (inhalation)	May cause damage to organs through prolonged or repeated exposure if inhaled.
: H400	Very toxic to aquatic life.
: H410	Very toxic to aquatic life with long lasting effects.
: H412	Harmful to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

: Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
: Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
: Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
: Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
: Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
: Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
: Skin Sens. 1A, H317	SKIN SENSITIZATION - Category 1A
: STOT RE 1, H372 (respiratory tract) (inhalation)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) (inhalation) - Category 1
: STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED



## SECTION 16: Other information

(inhalation)	EXPOSURE) (inhalation) - Category 2
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### Notice to reader

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.