## **SAFETY DATA SHEET**



## NeoRez R-972

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

1.1 Product identifier

Product name : NeoRez R-972
Internal code : 030375WW43712
Chemical formula : Not applicable.

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

Recommended use : Resin used in the production of coatings, inks and/or adhesives.

1.3 Details of the supplier of the safety data sheet

Supplier : DSM Coating Resins B.V. Tel: +31 416 752222

PO Box 123 www.dsmcoatingresins.com 5140 AC Waalwijk

Netherlands

e-mail address of person responsible for this SDS

: DSMRESINS.SDS@dsm.com

(Communication in English only please)

1.4 Emergency telephone number

Emergency telephone : Belgium: +32 3 575 5555

number

Remarks :

## 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]

Repr. 1B, H360D (Unborn child)

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.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

**Hazard statements** : H360D - May damage the unborn child.

Supplemental label

elements

: Not applicable.

**Precautionary statements** 

**Prevention**: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves: > 8 hours (breakthrough time): butyl rubber (0.70 mm); < 1 hour (breakthrough time): nitrile rubber (0.5 mm). Wear eye or face protection. Wear protective

clothing.

**Response** : P308 + P313 - IF exposed or concerned: Get medical attention.

Storage : P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazardous ingredients : M-methyl-2-pyrrolidone

2.3 Other hazards

Other hazards which do not result in classification

: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

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# SECTION 3: Composition/information on ingredients

#### 3.1 Substances / 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification
			Regulation (EC) No. 1272/2008 [CLP]
M-methyl-2-pyrrolidone	REACH #: 01-2119472430-46 EC: 212-828-1 CAS: 872-50-4 Index: 606-021-00-7	<10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360D (Unborn child) STOT SE 3, H335
Nonylphenol, branched, ethoxylated	CAS: 68412-54-4	<1	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411
triethylamine	REACH #: 01-2119475467-26 EC: 204-469-4 CAS: 121-44-8 Index: 612-004-00-5	<1	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 STOT SE 3, H335
			See Section 16 for the full text of the H 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.

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get

medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes

thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

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. Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

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

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Skin contact : No known significant effects or critical hazards.

Ingestion : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

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No specific data. Eye contact

Inhalation Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact Adverse symptoms may include the following:

> irritation dryness cracking

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

#### 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.

: No specific treatment. Specific treatments

# SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Small fire

: Use dry chemical or CO2. Suitable

Not suitable : None known

Large fire

Suitable : Use water, foam or dry chemical powder.

Not suitable : None known.

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

Hazards from the

substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion** 

products

: In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids, nitrogen oxides (NO, NO2 etc.),

ammonia (NH3), amines.

#### 5.3 Advice for firefighters

Special protective actions

for fire-fighters

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN

469 will provide a basic level of protection for chemical incidents.

: The material will not support combustion unless the water has evaporated Remarks

## SECTION 6: Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal

protective equipment.

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).

## 6.3 Methods and material for containment and cleaning up

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Small spill

Stop leak if without risk. Move containers from spill area. 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. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight. Sensitive to frost

7.3 Specific end use(s)

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

## 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
M-methyl-2-pyrrolidone	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 80 mg/m³ 15 minutes.  STEL: 20 ppm 15 minutes.  TWA: 40 mg/m³ 8 hours.
triethylamine	TWA: 40 ng/m 8 hours.  EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 17 mg/m³ 15 minutes.  TWA: 2 ppm 8 hours.  TWA: 8 mg/m³ 8 hours.  STEL: 4 ppm 15 minutes.

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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	Туре	Exposure	Value	Population	Effects
M-methyl-2-pyrrolidone	DNEL	Long term Dermal	19.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	40 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	80 mg/m³	Workers	Systemic
triethylamine	DNEL	Short term Inhalation	12.6 mg/m <sup>3</sup>	Workers	Systemic
•	DNEL	Short term Inhalation	12.6 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Dermal	12.1 mg/kg bw/day	Workers	Systemic
	DNEL DNEL	Long term Inhalation Long term Inhalation	8.4 mg/m³ 8.4 mg/m³	Workers Workers	Systemic Local

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
M-methyl-2-pyrrolidone	Fresh water	0.25 mg/l	-
• • •	Marine	0.025 mg/l	-
	Fresh water sediment	0.805 mg/kg	-
	Marine water sediment	0.0805 mg/	-
		kg	
	Soil	0.138 mg/kg	-
	Sewage Treatment Plant	10 mg/kg	-
	Secondary Poisoning	0.00167 mg/	-
		kg	
riethylamine	Fresh water	0.064 mg/l	-
•	Marine	0.0064 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	0.1992 mg/	-
		kg dwt	
	Soil	2.361 mg/kg	-
		dwt	

#### 8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

## **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

Full-face mask

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. > 8 hours (breakthrough time): butyl rubber (0.70 mm)

< 1 hour (breakthrough time): nitrile rubber (0.5 mm)

Skin and body

Chemical-resistant protective suit.

Respiratory protection

Self-contained breathing apparatus. - air fed respirator .

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.

Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual exposure situation.

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# SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Yellowish, translucent.

Odour : Odourless. **Odour threshold** : Not available. : 7.7 to 8.3 Melting point/freezing point : Not available. Initial boiling point and : 100 °C

boiling range

Softening range : Not available. Flash point : >100 °C (estimate) Flammability (solid, gas) : Not available. : Not available. **Evaporation rate** 

Upper/lower flammability or

explosive limits

: 2.3 kPa

: Not available.

Vapour pressure : Not available. Vapour density : 1.03 (Water = 1) Relative density : 1.03 g/cm3 (20°C) Density (g/cm³) **Bulk density** : Not available.

Solubility : Partially soluble in the following materials: cold water and hot water.

Solubility in water Partition coefficient: n-

octanol/water

: Not available. : Not available.

Auto-ignition temperature : Not applicable. **Decomposition temperature** : Not available.

Viscosity Dynamic (room temperature): 50 to 150 mPa·s (50 to 150 cP)

Kinematic (room temperature): 0.97 cm<sup>2</sup>/s (97 cSt)

Kinematic (40°C): >0.205 cm<sup>2</sup>/s (>20.5 cSt)

**Explosive properties** : Not available. **Oxidising properties** : Not available.

9.2 Other information

Remarks : Miscible in water.

# **SECTION 10: Stability and reactivity**

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : The product is stable.

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

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

: No specific data.

decomposition products

# SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute toxicity** 

10.6 Hazardous

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Product/ingredient name	Result	Species	Dose	Exposure
M-methyl-2-pyrrolidone	LC50 Inhalation	Rat	>5.1 mg/l	4 hours
	Dusts and mists			
	LD50 Dermal	Rabbit	8000 mg/kg	-
	LD50 Dermal	Rat	7000 mg/kg	-
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	3600 mg/kg	-
	LD50 Oral	Rat	4150 mg/kg	-
Nonylphenol, branched, ethoxylated	LD50 Dermal	Rabbit	4400 mg/kg	-
triethylamine	LC50 Inhalation	Rat	7.1 mg/l	4 hours
,	Vapour			
	LD50 Dermal	Rabbit	570 mg/kg	-
	LD50 Oral	Rat	460 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
	39153 mg/kg
Dermal	66202.1 mg/kg
Inhalation (vapours)	824.6 mg/l

## Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
M-methyl-2-pyrrolidone	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
Nonylphenol, branched, ethoxylated	Skin - Non-irritating	Mammal - species unspecified	0	-	-
	Eyes - Irritant	Mammal - species unspecified	-	-	-
triethylamine	Skin - Mild irritant	Rabbit	-	365 milligrams	
	Skin - Visible necrosis	Rabbit	-	1 to 15 minutes	26 hours
	Eyes - Cornea opacity	Rabbit	3	-	-

Conclusion/Summary

Eyes: Not available.Skin: Not available.Respiratory: Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
rethylamine	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin: Not available.Respiratory: Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
M-methyl-2-pyrrolidone	Ames test	Experiment: In vitro Subject: Bacteria	Negative
Nonylphenol, branched, ethoxylated	-	Subject: Bacteria	Negative
triethylamine	Ames test	Experiment: In vitro Subject: Bacteria	Negative
	-	Experiment: In vivo Subject: Mammalian- Animal	Negative

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)

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Product/ingredient name	Category	Route of exposure	Target organs
M-methyl-2-pyrrolidone	Category 3	Not applicable.	Respiratory tract irritation
triethylamine	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

**Aspiration hazard** 

Not available.

Potential acute health effects

**Eye contact**: No known significant effects or critical hazards.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed

following exposure.

 Skin contact
 : No known significant effects or critical hazards.

 Ingestion
 : Corrosive to the digestive tract. Causes burns.

 Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact** : Adverse symptoms may include the following:

irritation dryness cracking

reduced foetal weight increase in foetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

stomach pains

reduced foetal weight increase in foetal deaths skeletal malformations

#### Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
rethylamine	Sub-chronic NOAEC Inhalation Vapour	Rat	247 ppm	28 weeks; 6 hours per day

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.

**Teratogenicity**: May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
M-methyl-2-pyrrolidone	-	-	-	None.	-	-
triethylamine	A4	-	-	-	-	-

# **SECTION 12: Ecological information**

## 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure	Effects
M-methyl-2-pyrrolidone	Acute EC50 >9000 mg/l	Bacteria	48 hours	-
	Acute EC50 >1000 mg/l	Daphnia	24 hours	-
	Acute EC50 >600 mg/l	Micro-organism	0.5 hours	-
	Acute IC50 >500 mg/l	Algae	72 hours	-
	Acute LC50 >500 mg/l	Fish	96 hours	-
	Acute LC50 832 ppm Fresh water	Fish - Lepomis macrochirus	96 hours	Mortality
	Chronic NOEC 12.5 mg/l	Daphnia	21 days	-
Nonylphenol, branched,	Acute LC50 7.9 mg/l Fresh	Fish	96 hours	-

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ethoxylated	water			
triethylamine	Acute EC50 1.167 mg/l	Algae	96 hours	-
	Acute EC50 95 mg/l	Bacteria	17 hours	-
	Acute EC50 17 mg/l	Daphnia	48 hours	-
	Acute LC50 36 mg/l	Fish	96 hours	-
	Acute NOAEC 12 mg/l	Daphnia	48 hours	-
	Acute NOEC 16 mg/l	Fish	-	-
	Chronic LC50 137 mg/l	Fish	60 days	-
	Chronic NOEC 7.1 mg/l	Daphnia	7 days	-
	Chronic NOEC 3.2 mg/l	Fish	60 days	-

Conclusion/Summary : Not available.

## 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
M-methyl-2-pyrrolidone	301C Ready Biodegradability -	73 % - Readily - 28 days	-	-
	Modified MITI Test (I)			
Nonylphenol, branched, ethoxylated	OECD 301B Ready	44.5 % - Not readily - 28 days	-	-
	Biodegradability -	,		
	CO2 Evolution Test			
triethylamine	OECD 301B Ready	80 % - Readily - 21 days	-	-
	Biodegradability - CO2 Evolution			
	Test			

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
M-methyl-2-pyrrolidone	-		Readily
Nonylphenol, branched, ethoxylated	-	-	Not readily
triethylamine	-	-	Readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
M-methyl-2-pyrrolidone triethylamine	-0.46	0.2	low
	1.45	<0.5	low

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

#### 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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Avoid dispersal of spilt material and runoff and contact with soil,

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waterways, drains and sewers.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

<u>Packaging</u>

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.

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. Avoid dispersal of spilt material and runoff and contact

with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not available.

# 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

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
rethyl-2-pyrrolidone 4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	Toxic to reproduction Substance of equivalent concern for environment	Candidate Candidate	ED/31/2011 ED/169/2012	6/30/2011 4/19/2013

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

Restricted to professional users.

## Other EU regulations

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Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
M-methyl-2-pyrrolidone	-	-	Repr. 1B, H360D (Unborn child)	-

## Ozone depleting substances (1005/2009/EU)

Not listed

## Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

### **National regulations**

## International regulations

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

Ingredient name	List name	Status
Not listed.		

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

Ingredient name	Status
Not listed.	

### Stockholm Convention on Persistent Organic Pollutants

Ingredient name	List name	Status
Not listed.		

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

Ingredient name	List name	Status
Not listed.		

## **UNECE Aarhus Protocol on POPs and Heavy Metals**

Ingredient name	List name	Status
Not listed.		

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

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

Classification	Justification
Repr. 1B, H360D (Unborn child)	Calculation method

## Full text of abbreviated H statements

<b>⊮</b> 225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H360D (Unborn child)	May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.

# Full text of classifications [CLP/GHS]

V . T 0 11044	AQUITE TOYIOTTY (1 N. O. I. O.
Cute Tox. 3, H311	ACUTE TOXICITY (dermal) - Category 3
Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Aquatic Chronic 2, H411	LONG-TERM AQUATIC HAZARD - Category 2
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Repr. 1B, H360D (Unborn child)	TOXIC TO REPRODUCTION (Unborn child) - Category 1B
Skin Corr. 1A, H314	SKIN CORROSION/IRRITATION - Category 1A
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Respiratory tract irritation) - Category 3

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Alterations compared to the

previous version

: Alterations compared to the previous version are marked with a little (blue) triangle.

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

Sources of key data : Literature data and/or investigation reports are available through the manufacturer.

**Internal code** : 030375WW43712

Training advice : Handling of this substance or preparation is restricted to skilled personnel only.

#### Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

#### History

Date of printing : 1 April 2016.

Date of issue : 1 April 2016

Version : 7

Date of issue/Date of revision: 1 April 2016 Version: 7 Page: 12/12