

MB18501 - NZYol

Date of compilation: 13/08/2020


Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** MB18501 - NZYol
- Other means of identification:**
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Laboratory. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
NZYtech, Lda
Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c
1649-038 Lisboa - Lisboa - Portugal
Phone: +351 213643514
info@nzytech.com
www.nzytech.com
- 1.4 Emergency telephone number:** National Poison Center (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your regional Poisons Information Service or call local Life Saving Service.

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
- CLP Regulation (EC) No 1272/2008:**
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Acute Tox. 3: Acute toxicity, Category 3, H301+H331
Acute Tox. 4: Acute toxicity on contact with skin, Category 4, H312
Eye Dam. 1: Serious eye damage, Category 1, H318
Muta. 2: Germ cell mutagenicity, Category 2, H341
Skin Corr. 1B: Skin corrosion, Category 1B, H314
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2, H373
- 2.2 Label elements:**
- CLP Regulation (EC) No 1272/2008:**
Labelling of packages where the contents do not exceed 125 ml:
Danger
- 
- Hazard statements:**
Acute Tox. 3: H301+H331 - Toxic if swallowed or if inhaled.
Muta. 2: H341 - Suspected of causing genetic defects.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
- Precautionary statements:**
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
- Supplementary information:**
EUH032: Contact with acids liberates very toxic gas.
EUH071: Corrosive to the respiratory tract.
- Substances that contribute to the classification**

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 2: HAZARDS IDENTIFICATION (continued)

phenol; Guanidinium thiocyanate; Ammonium thiocyanate

UFI: NN10-X0WA-0009-DMDY

2.3 Other hazards:

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 108-95-2 EC: 203-632-7 Index: 604-001-00-2 REACH: 01-2119471329-28-XXXX	phenol⁽¹⁾ ATP CLP00	2,5 - <50 %
	Regulation 1272/2008 Acute Tox. 3: H301+H311+H331; Muta. 2: H341; Skin Corr. 1B: H314; STOT RE 2: H373 - Danger	
CAS: 593-84-0 EC: 209-812-1 Index: Non-applicable REACH: 01-2120735072-65-XXXX	Guanidinium thiocyanate⁽¹⁾ Self-classified	2,5 - <10 %
	Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1C: H314; EUH071 - Danger	
CAS: 1762-95-4 EC: 217-175-6 Index: 615-032-00-6 REACH: 01-2119543696-28-XXXX	Ammonium thiocyanate⁽¹⁾ Self-classified	2,5 - <10 %
	Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412 - Warning	

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
phenol CAS: 108-95-2 EC: 203-632-7	% (w/w) >=3: Skin Corr. 1B - H314 1<= % (w/w) <3: Skin Irrit. 2 - H315 % (w/w) >=1: Eye Irrit. 2 - H319

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	Non-applicable	1100 mg/kg (ATEi)	
	11 mg/L (ATEi)		
phenol CAS: 108-95-2 EC: 203-632-7	Non-applicable	Non-applicable	
	Non-applicable	3 mg/L (ATEi)	
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	Non-applicable	1100 mg/kg (ATEi)	
	1100 mg/kg (ATEi)		
	11 mg/L (ATEi)		

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 4: FIRST AID MEASURES (continued)**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Induce vomiting (ONLY IF PERSON IS CONSCIOUS!) and then ingest large quantities of liquid to dilute the toxin. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media:****Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020 Revised: 05/01/2024 Version: 4 (Replaced 3)

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

It is recommended to avoid environmental spillage of both the product and its container.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits	
	phenol CAS: 108-95-2 EC: 203-632-7	IOELV (8h)
	IOELV (STEL)	4 ppm 16 mg/m ³

DNEL (Workers):

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
phenol CAS: 108-95-2 EC: 203-632-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,23 mg/kg	Non-applicable
	Inhalation	Non-applicable	16 mg/m ³	8 mg/m ³	Non-applicable
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,31 mg/kg	Non-applicable
	Inhalation	3,28 mg/m ³	Non-applicable	1,092 mg/m ³	Non-applicable
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	4 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,8 mg/m ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
phenol CAS: 108-95-2 EC: 203-632-7	Oral	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,32 mg/m ³	Non-applicable
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	Oral	Non-applicable	Non-applicable	0,155 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,155 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,27 mg/m ³	Non-applicable
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	Oral	Non-applicable	Non-applicable	0,2 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,7 mg/m ³	Non-applicable

PNEC:

Identification				
phenol CAS: 108-95-2 EC: 203-632-7	STP	2,1 mg/L	Fresh water	0,008 mg/L
	Soil	0,136 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,031 mg/L	Sediment (Fresh water)	0,091 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,009 mg/kg
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	STP	20 mg/L	Fresh water	0,0424 mg/L
	Soil	0,00803 mg/kg	Marine water	0,00424 mg/L
	Intermittent	0,424 mg/L	Sediment (Fresh water)	0,165 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0165 mg/kg
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	STP	30 mg/L	Fresh water	0,095 mg/L
	Soil	6,336 mg/kg	Marine water	0,009 mg/L
	Intermittent	0,027 mg/L	Sediment (Fresh water)	0,543 mg/kg
	Oral	0,001667 g/kg	Sediment (Marine water)	0,054 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

- CONTINUED ON NEXT PAGE -



MB18501 - NZYoI

Date of compilation: 13/08/2020



Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	40,65 % weight
V.O.C. density at 20 °C:	439,98 kg/m ³ (439,98 g/L)
Average carbon number:	6
Average molecular weight:	94,1 g/mol

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES **

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Blue
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	130 °C
Vapour pressure at 20 °C:	1962 Pa
Vapour pressure at 50 °C:	10361,69 Pa (10,36 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1082,3 kg/m ³
Relative density at 20 °C:	1,082
Dynamic viscosity at 20 °C:	30,83 cP
Kinematic viscosity at 20 °C:	28,48 mm ² /s
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	4 - 5
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	79 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	715 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

MB18501 - NZYoI

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES ** (continued)

Other safety characteristics:

Surface tension at 20 °C: Non-applicable *

Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

** Changes with regards to the previous version

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Produces very toxic gases	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Can be fatal if consumed. For more information see section 2.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Can be fatal after prolonged periods of exposure, as it releases toxic gases when it comes into contact with acids
- Corrosivity/Irritability: Corrosive to the respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: phenol (3)
- Mutagenicity: Exposure to this product can cause genetic modifications. For more specific information on the possible health effects see section 2.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	LD50 oral	598 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (ATEi)	
phenol CAS: 108-95-2 EC: 203-632-7	LD50 oral	100 mg/kg	Rat
	LD50 dermal	630 mg/kg	Rabbit
	LC50 inhalation	3 mg/L (ATEi)	
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	LD50 oral	593 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (ATEi)	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	233,79 mg/kg (Calculation method)	0 %
Dermal	1315,85 mg/kg (Calculation method)	0 %
Inhalation	6,8 mg/L (4 h) (Calculation method)	0 %

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

- CONTINUED ON NEXT PAGE -

MB18501 - NZYoI

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 12: ECOLOGICAL INFORMATION (continued)

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
	LC50			
phenol CAS: 108-95-2 EC: 203-632-7	LC50	14 mg/L (96 h)	Leuciscus idus	Fish
	EC50	12 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	370 mg/L (96 h)	Chlorella vulgaris	Algae
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	LC50	89,1 mg/L (96 h)	Poecilia reticulata	Fish
	EC50	42,4 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	130 mg/L (72 h)	Desmodesmus subspicatus	Algae
Ammonium thiocyanate CAS: 1762-95-4 EC: 217-175-6	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
	NOEC			
phenol CAS: 108-95-2 EC: 203-632-7	NOEC	0,077 mg/L	Cirrhina mrigala	Fish
	NOEC	0,16 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
phenol CAS: 108-95-2 EC: 203-632-7	BOD5	1,68 g O2/g	Concentration	100 mg/L
	COD	2,33 g O2/g	Period	14 days
	BOD5/COD	0,72	% Biodegradable	85 %
Guanidinium thiocyanate CAS: 593-84-0 EC: 209-812-1	BOD5	Non-applicable	Concentration	343 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	32 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
phenol CAS: 108-95-2 EC: 203-632-7	BCF	17
	Pow Log	1.48
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
phenol CAS: 108-95-2 EC: 203-632-7	Koc	50	Henry	2,2E-2 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	1,847E-2 N/m (231,01 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

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Version: 4 (Replaced 3)

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP12 Release of an acute toxic gas, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP11 Mutagenic, HP8 Corrosive

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Guanidinium thiocyanate; phenol)
- 14.3 Transport hazard class(es):** 8
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
Special regulations: 274
Tunnel restriction code: E
Physico-Chemical properties: see section 9
Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Guanidinium thiocyanate; phenol)
- 14.3 Transport hazard class(es):** 8
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**
Special regulations: 274
EmS Codes: F-A, S-B
Physico-Chemical properties: see section 9
Limited quantities: 1 L
Segregation group: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by air:

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

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SECTION 14: TRANSPORT INFORMATION (continued)

With regard to IATA/ICAO 2023:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Guanidinium thiocyanate; phenol)
- 14.3 Transport hazard class(es):** 8
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable
Article 95, REGULATION (EU) No 528/2012: Non-applicable
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
H2	ACUTE TOXIC	50	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Information on basic physical and chemical properties (SECTION 9):

- Flash Point

Texts of the legislative phrases mentioned in section 2:

- CONTINUED ON NEXT PAGE -

MB18501 - NZYol

Date of compilation: 13/08/2020

Revised: 05/01/2024

Version: 4 (Replaced 3)

SECTION 16: OTHER INFORMATION (continued)

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H341: Suspected of causing genetic defects.
H373: May cause damage to organs through prolonged or repeated exposure.
H312: Harmful in contact with skin.
H301+H331: Toxic if swallowed or if inhaled.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Muta. 2: H341 - Suspected of causing genetic defects.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Classification procedure:

Skin Corr. 1B: Calculation method
Eye Dam. 1: Calculation method
Muta. 2: Calculation method
STOT RE 2: Calculation method
Acute Tox. 4: Calculation method
Acute Tox. 3: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -