Diversey
A SOLENIS COMPANY

Safety Data Sheet

JONSEAL 220

Revision: 2024-10-22 **Version:** 01.0

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

1.1 Product identifier
Trade name: JONSEAL 220

1.2 Recommended use and restrictions on use
See product label.
For professional and industrial use only.

1.3 Details of the supplier of the safety data sheet
SOLENIS VIETNAM COMPANY LIMITED

Contact details
Level 4&5, M-Building, Lot C7B-02A, Block A, No.9 Street 8, Zone Saigon South New Urban Area, Tan Phu Ward, District 7, Ho Chi Minh City, VIETNAM
Tel. 0314996293

1.4 Emergency telephone number
In case of medical emergency, please seek professional medical advice.

SECTION 2: Composition/information on ingredients

2.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Classification	Weight percent
Modified acrylic polymers	TS*			10-20
2-(2-ethoxyethoxy)ethanol	111-90-0	203-919-7	Acute toxicity - Oral, Category 5 (H303)	3-10
Arolon 846 W-42	TS*			3-10
Alcohols, C12-14-secondary, ethoxylated	84133-50-6		Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Inhalation, Category 4 (H332) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)	1-3
1,5-Pentanediamine, 2-methyl-	15520-10-2	239-556-6	Acute toxicity - Inhalation, Category 3 (H331) Skin corrosion, Category 1A (H314) Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318)	0.1-1
Alcohols, C12-15, ethoxylated	68131-39-5	[4]	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 3 (H412)	0.1-1

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.

SECTION 3: Hazards identification

3.1 Classification of the substance or mixture
Eye irritation, Category 2A
Acute aquatic toxicity, Category 3

3.2 Label elements

Signal word: Warning.

Hazard statements:
H319 - Causes serious eye irritation.

3.3 Other hazards
No other hazards known. Exposure and appropriate engineering controls are specified in subsection 8.2 exposure controls.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No known effects or symptoms in normal use.
Skin contact:	No known effects or symptoms in normal use.
Eye contact:	Causes severe irritation.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
No special measures required.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, universal binders).

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advice on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls:	No special requirements under normal use conditions.
Appropriate organisational controls:	Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment	
Eye / face protection:	Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 16321 / EN 166).
Hand protection:	No special requirements under normal use conditions.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	No special requirements under normal use conditions.
Environmental exposure controls:	No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Method / remark
Physical state: Liquid	
Colour: Milky , White	
Odour: Product specific	
Odour threshold: Not applicable	
pH: ≈ 11 (neat)	ISO 4316
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	
Flammability (liquid): Not flammable.	
Flash point (°C): > 93.4 °C	
Sustained combustion: Not applicable.	
(UN Manual of Tests and Criteria, section 32, L.2)	
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Lower and upper explosion limit/flammability limit (%): Not determined	
Vapour pressure: Not determined	
Relative density: ≈ 1.03 (20 °C)	OECD 109 (EU A.3)
Relative vapour density: Not determined.	Not relevant to classification of this product
Particle characteristics: No data available.	Not applicable to liquids.
Solubility in / Miscibility with water: Fully miscible	
Partition coefficient: n-octanol/water No information available.	

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Kinematic viscosity: ≈ 5 mPa.s (20 °C)
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
Reacts with acids.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >5000
ATE - Inhalatory, mists (mg/l): >1

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	LD_{50}	5540	Rat	Method not given	
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated	LD_{50}	>300 - <=2000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	LD_{50}	5940	Rat	Method not given	
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated	LD_{50}	>300 - <=2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)

Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	LC_0	> 5.24 (mist)	Rat	OECD 403 (EU B.2)	8
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	Irritant			
1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	Mild irritant			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	Severe damage			
1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	Severe damage			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	No data available			
1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	Not sensitising		Method not given	
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	No data available			
1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	No data available			
1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Modified acrylic polymers	No data available		No data available	
2-(2-ethoxyethoxy)ethanol	No data available		No data available	
Arolon 846 W-42	No data available		No data available	

Alcohols, C12-14-secondary, ethoxylated	No data available		No data available	
1,5-Pentanediamine, 2-methyl-	No data available		No data available	
Alcohols, C12-15, ethoxylated	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
Modified acrylic polymers	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Arolon 846 W-42	No data available
Alcohols, C12-14-secondary, ethoxylated	No data available
1,5-Pentanediamine, 2-methyl-	No data available
Alcohols, C12-15, ethoxylated	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
Modified acrylic polymers			No data available				
2-(2-ethoxyethoxy)ethanol			No data available				
Arolon 846 W-42			No data available				
Alcohols, C12-14-secondary, ethoxylated			No data available				
1,5-Pentanediamine, 2-methyl-			No data available				
Alcohols, C12-15, ethoxylated			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Modified acrylic polymers		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Arolon 846 W-42		No data available				
Alcohols, C12-14-secondary, ethoxylated		No data available				
1,5-Pentanediamine, 2-methyl-		No data available				
Alcohols, C12-15, ethoxylated		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Modified acrylic polymers		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Arolon 846 W-42		No data available				
Alcohols, C12-14-secondary, ethoxylated		No data available				
1,5-Pentanediamine, 2-methyl-		No data available				
Alcohols, C12-15, ethoxylated		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Modified acrylic polymers		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Arolon 846 W-42		No data available				
Alcohols, C12-14-secondary, ethoxylated		No data available				

1,5-Pentanediamine, 2-methyl-		No data available				
Alcohols, C12-15, ethoxylated		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
Modified acrylic polymers			No data available					
2-(2-ethoxyethoxy)ethanol			No data available					
Arolon 846 W-42			No data available					
Alcohols, C12-14-secondary, ethoxylated			No data available					
1,5-Pentanediamine, 2-methyl-			No data available					
Alcohols, C12-15, ethoxylated			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Modified acrylic polymers	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Arolon 846 W-42	No data available
Alcohols, C12-14-secondary, ethoxylated	No data available
1,5-Pentanediamine, 2-methyl-	No data available
Alcohols, C12-15, ethoxylated	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Modified acrylic polymers	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Arolon 846 W-42	No data available
Alcohols, C12-14-secondary, ethoxylated	No data available
1,5-Pentanediamine, 2-methyl-	No data available
Alcohols, C12-15, ethoxylated	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture .

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	LC_{50}	> 100	*Pimephales promelas*	Method not given	96
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated	LC_{50}	No data available			
1,5-Pentanediamine, 2-methyl-	LC_{50}	No data available			
Alcohols, C12-15, ethoxylated	LC_{50}	> 2	*Fish*	Method not given OECD 203, static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	EC_{50}	1982	*Daphnia magna Straus*	Method not given	48
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated	EC_{50}	3.1	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated	EC_{50}	0.23	*Daphnia*	Method not given OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	EC_{50}	14861	*Pseudokirchneriella subcapitata*	Method not given	72
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated	EC_{50}	0.75	*Pseudokirchneriella subcapitata*		72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol		No data available			
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
Modified acrylic polymers		No data available			
2-(2-ethoxyethoxy)ethanol	EC_{50}	> 5000		Method not given	16 hour(s)
Arolon 846 W-42		No data available			
Alcohols, C12-14-secondary, ethoxylated		No data available			
1,5-Pentanediamine, 2-methyl-		No data available			
Alcohols, C12-15, ethoxylated		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Modified acrylic polymers		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Arolon 846 W-42		No data available				
Alcohols, C12-14-secondary, ethoxylated		No data available				
1,5-Pentanediamine, 2-methyl-		No data				

		available				
Alcohols, C12-15, ethoxylated	NOEC	> 0.1 - <= 1.0		Method not given		

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Modified acrylic polymers		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Arolon 846 W-42		No data available				
Alcohols, C12-14-secondary, ethoxylated		No data available				
1,5-Pentanediamine, 2-methyl-		No data available				
Alcohols, C12-15, ethoxylated	NOEC	> 0.1 - <= 1.0		Method not given		

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
Alcohols, C12-15, ethoxylated	EC_{50}	No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
Modified acrylic polymers					Not readily biodegradable.
2-(2-ethoxyethoxy)ethanol			90 % in 28 day(s)	OECD 301E	Readily biodegradable
Arolon 846 W-42					Not readily biodegradable.
Alcohols, C12-14-secondary, ethoxylated			> 60 % in 28 day(s)	OECD 301F	Readily biodegradable
1,5-Pentanediamine, 2-methyl-				OECD 301D	Readily biodegradable
Alcohols, C12-15, ethoxylated	Activated sludge, aerobe	CO_2 production	72% in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Modified acrylic polymers	No data available			
2-(2-ethoxyethoxy)ethanol	-0.8	Method not given	No bioaccumulation expected	
Arolon 846 W-42	No data available			
Alcohols, C12-14-secondary, ethoxylated	3.3 - 4.4			

1,5-Pentanediamine, 2-methyl-	No data available			
Alcohols, C12-15, ethoxylated	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Modified acrylic polymers	No data available				
2-(2-ethoxyethoxy)ethanol	No data available				
Arolon 846 W-42	No data available				
Alcohols, C12-14-secondary, ethoxylated	No data available				
1,5-Pentanediamine, 2-methyl-	No data available				
Alcohols, C12-15, ethoxylated	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Modified acrylic polymers	No data available				
2-(2-ethoxyethoxy)ethanol	No data available				High potential for mobility in soil
Arolon 846 W-42	No data available				
Alcohols, C12-14-secondary, ethoxylated	No data available				
1,5-Pentanediamine, 2-methyl-	No data available				
Alcohols, C12-15, ethoxylated	No data available				

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information

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

National regulations

• Decree 108/2008/NP-CP Circular No.: 04/2012/TT-BCT Regulations on the Classification and Labeling of Chemicals

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS4800124 **Version:** 01.0 **Revision:** 2024-10-22

Abbreviations and acronyms:
• DNEL - Derived No Effect Limit
• PNEC - Predicted No Effect Concentration
• ATE - Acute Toxicity Estimate
• LD50 - Lethal Dose, 50% / Median Lethal dose
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• EC50 - effective concentration, 50%
• NOEL - No observed effect level
• NOAEL - No observed adverse effect level
• STOT-RE - Specific target organ toxicity (repeated exposure)
• STOT-SE - Specific target organ toxicity (single exposure)
• OECD - Organisation for Economic Cooperation and Development
• H302 - Harmful if swallowed.
• H303 - May be harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• H315 - Causes skin irritation.
• H318 - Causes serious eye damage.
• H331 - Toxic if inhaled.
• H332 - Harmful if inhaled.
• H400 - Very toxic to aquatic life.
• H412 - Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet