SAFETY DATA SHEET

Intergard 821 Part B

Section 1. Chemical product and company identification

GHS product identifier

: Intergard 821 Part B

Product code

: EAA821

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

Identified uses			
Professional application of coatings and inks			
Uses ad	dvised against		Reason
All Other Uses			
Supplier's details	: International Paint Ltd. Stoneygate Lane Felling Gateshead Tyne and Wear NE10 0JY UK Tel: +44 (0)191 469 6111	Fax	x: +44 (0)191 438 3711
Emergency telephone number (with hours of operation)	: +44 (0)191 469 6111 (2	4H)	
National advisory body/ Poison Centre (For use only by licensed medical professionals.) e-mail address of person	: 8-10-1-202-625-3333 / 8-10- : sdsfellinguk@akzonobel.com		2-784-4660
responsible for this SDS International Paint Ltd (Ukrain	e), 5 Solnechnaya Str, Odessa,	Ukrair	ne

Tel: +380 482 346308 / 347417 Fax: +380 482 346 307

Section 2. Hazards identification

Classification of the	: ACUTE TOXICITY (oral) - Category 4
substance or mixture	SKIN CORROSION/IRRITATION - Category 1B
	SKIN SENSITIZATION - Category 1
	TOXIC TO REPRODUCTION (Fertility) - Category 1B
	TOXIC TO REPRODUCTION (Unborn child) - Category 2
	ACUTE AQUATIC HAZARD - Category 1
	LONG-TERM AQUATIC HAZARD - Category 1

GHS label elements



Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May damage fertility. Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store locked up.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:

Other hazards which do not : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	% by weight	CAS number	Classification
benzyl alcohol	≥10 - ≤25	100-51-6	Acute Tox. 4, H302 Acute Tox. 4, H332
2-piperazin-1-ylethylamine	≤10	140-31-8	Flam. Liq. 4, H227 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
m-phenylenebis(methylamine)	≤5	1477-55-0	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314
Date of issue/Date of revision : 19/0	3/2018	I	AkzoNobel

Section 3. Composition/information on ingredients

-			
			Skin Sens. 1, H317 Aquatic Chronic 3, H412
bisphenol A	≤3	80-05-7	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 (Fertility) STOT SE 3, H335
4-nonylphenol, branched	≤3	84852-15-3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Repr. 2, H361fd (Fertility and Unborn child) Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,6,9-triazaundecamethylenediamine	<1	112-57-2	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or phys flush eyes with plenty of water, occasionally lifting the upper and Check for and remove any contact lenses. Continue to rinse for Chemical burns must be treated promptly by a physician.	l lower eyelids.
Inhalation	: Get medical attention immediately. Call a poison center or physicitim to fresh air and keep at rest in a position comfortable for a suspected that fumes are still present, the rescuer should wear or self-contained breathing apparatus. If not breathing, if breath respiratory arrest occurs, provide artificial respiration or oxygen It may be dangerous to the person providing aid to give mouth-tresuscitation. If unconscious, place in recovery position and ge immediately. Maintain an open airway. Loosen tight clothing subelt or waistband. In case of inhalation of decomposition products symptoms may be delayed. The exposed person may need to I medical surveillance for 48 hours.	breathing. If it is an appropriate mask ning is irregular or if by trained personnel. o-mouth t medical attention uch as a collar, tie, cts in a fire,
Skin contact	: Get medical attention immediately. Call a poison center or physical plenty of soap and water. Remove contaminated clothing and signature contaminated clothing thoroughly with water before removing it, Continue to rinse for at least 10 minutes. Chemical burns must by a physician. In the event of any complaints or symptoms, av Wash clothing before reuse. Clean shoes thoroughly before reuse.	hoes. Wash or wear gloves. be treated promptly oid further exposure.
Ingestion	: Get medical attention immediately. Call a poison center or phys mouth with water. Remove dentures if any. Remove victim to f rest in a position comfortable for breathing. If material has been exposed person is conscious, give small quantities of water to be exposed person feels sick as vomiting may be dangerous. Do n unless directed to do so by medical personnel. If vomiting occu be kept low so that vomit does not enter the lungs. Chemical be promptly by a physician. Never give anything by mouth to an un If unconscious, place in recovery position and get medical atten Maintain an open airway. Loosen tight clothing such as a collar waistband.	resh air and keep at a swallowed and the lrink. Stop if the not induce vomiting rs, the head should urns must be treated aconscious person. tion immediately.
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3/14



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Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Most important symptoms/	effects, acute and delayed
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.
<u>Over-exposure signs/sym</u>	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur 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
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.



Section 5. Firefighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
Special protective actions	: Promptly isolate the scene by removing all persons from the vicinity of t

for fire-fighters	re is a fire. No action sha table training.	Il be taken involving any personal risk or without
Special protective equipment for fire-fighters	U	propriate protective equipment and self-contained with a full face-piece operated in positive pressure

Section 6. Accidental release measures

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. 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".
Environmental precautions Methods and material for cor		Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Small spill	:	Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures
 Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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 release to the environment. 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.



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Section 7. Handling and storage

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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.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
benzyl alcohol	РО МинЗдраСоц ПДК (Russian	
	Federation, 9/2011).	
	CEIL: 5 mg/m ³ Form: vapor and/or gases	
m-phenylenebis(methylamine)	ACGIH TLV (United States, 3/2015).	
	Absorbed through skin.	
	C: 0.1 mg/m ³	
bisphenol A	РО МинЗдраСоц ПДК (Russian	
'	Federation, 9/2013).	
	STEL: 5 mg/m ³ 15 minutes. Form: Aerosol	

Appropriate engineering	: If user operations generate dust, fumes, gas, vapour or mist, use process
controls	enclosures, local exhaust ventilation or other engineering controls to keep worker
	exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure	: Emissions from ventilation or work process equipment should be checked to ensur

Environmental exposure	:	Emissions from ventilation or work process equipment should be checked t	to ensure
controls		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.	

Individual protection measures

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be

Skin protection

required instead.

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Section 8. Exposure controls/personal protection

Hand protection	: Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance Physical state : Solid. Colour : Grey. Odour : Amine-like. **Odour threshold** : Not available. pН : Not applicable. **Melting point** : Not available. **Boiling point** : Not available. Flash point : Closed cup: 65°C (149°F) : Not available. **Evaporation rate** Flammability (solid, gas) : Not available. Lower and upper explosive : Not available. (flammable) limits : Not available. Vapour pressure Vapour density : Not available. **Relative density** : 0.8 : Not available. Solubility Partition coefficient: n-: Not available. octanol/water Auto-ignition temperature : Not available. **Decomposition temperature** : Not available. Viscosity : Kinematic (room temperature): 10000 mm²/s (10000 cSt)

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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Vapour	Rat	>4178 mg/l	4 hours
-	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1620 mg/kg	-
m-phenylenebis (methylamine)	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-
bisphenol A	LD50 Oral	Rat	1200 mg/kg	-
4-nonylphenol, branched	LD50 Oral	Rat	1300 mg/kg	-
3,6,	LD50 Dermal	Rabbit	660 uL/kg	-
9-triazaundecamethylenediamine				
-	LD50 Oral	Rat	3990 mg/kg	-

Irritation/Corrosion

Result	Species	Score	Exposure	Observation
Skin - Mild irritant	Man	-	48 hours 16	-
			milligrams	
Skin - Moderate irritant	Pig	-	100 Percent	-
Skin - Moderate irritant	Rabbit	-	24 hours 100	-
			milligrams	
Eyes - Moderate irritant	Rabbit	-		-
			•	
Skin - Severe irritant	Rabbit	-		-
			•	
Eyes - Severe irritant	Rabbit	-		-
Skin - Severe irritant	Rabbit	-		-
	D 11 11			
Eyes - Severe irritant	Rabbit	-		-
Ohim Milel inside at	Dabbit			
Skin - Mild Irritant	Raddit	-		-
Skin Mild irritant	Dabbit			
Skin - Mild Initant	Rabbit	-		-
Eves Severe irritant	Pabbit		-	
Lyes - Severe initalit	Tabbit	-		-
Skin - Severe irritant	Rabbit	_		-
Eves - Moderate irritant	Rabbit	_	•	-
	Skin - Mild irritant Skin - Moderate irritant Skin - Moderate irritant	Skin - Mild irritantManSkin - Moderate irritantPig RabbitSkin - Moderate irritantPig RabbitEyes - Moderate irritantRabbitSkin - Severe irritantRabbitSkin - Mild irritantRabbitSkin - Mild irritantRabbitEyes - Severe irritantRabbitSkin - Mild irritantRabbitSkin - Severe irritantRabbitSkin - Severe irritantRabbit	Skin - Mild irritantMan-Skin - Moderate irritantPig Rabbit-Eyes - Moderate irritantRabbit-Eyes - Moderate irritantRabbit-Skin - Severe irritantRabbit-Skin - Severe irritantRabbit-Eyes - Severe irritantRabbit-Skin - Severe irritantRabbit-Skin - Severe irritantRabbit-Skin - Severe irritantRabbit-Skin - Mild irritantRabbit-Skin - Mild irritantRabbit-Eyes - Severe irritantRabbit-Skin - Mild irritantRabbit-Skin - Severe irritantSkin-Skin - Severe irritantSkin-Skin - Severe irritantSkinSkin - Severe irritant<	Skin - Mild irritantMan-48 hours 16 milligramsSkin - Moderate irritantPig-100 PercentSkin - Moderate irritantRabbit-24 hours 100 milligramsEyes - Moderate irritantRabbit-24 hours 20 milligramsSkin - Severe irritantRabbit-24 hours 5 milligramsSkin - Severe irritantRabbit-24 hours 50 MicrogramsSkin - Severe irritantRabbit-24 hours 500 MicrogramsSkin - Mild irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-250 milligramsSkin - Severe irritantRabbit-100 milligramsSkin - Severe irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-24 hours 500 milligramsSkin - Severe irritantRabbit-24 hours 500 milligrams



Section 11. Toxicological information

	•				
9-triazaundecamethylenediamine				milligrams	
	Eyes - Moderate irritant	Rabbit	-	5 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 5	-
				milligrams	
	Skin - Severe irritant	Rabbit	-	495	-
				milligrams	
	9-triazaundecamethylenediamine	Skin - Severe irritant	Eyes - Moderate irritant Rabbit Skin - Severe irritant Rabbit	Eyes - Moderate irritant Skin - Severe irritantRabbit Rabbit-Skin - Severe irritantRabbit-	Eyes - Moderate irritantRabbit-5 milligramsSkin - Severe irritantRabbit-24 hours 5milligrams

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
bisphenol A	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available. of exposure Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	 May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

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Section 11. Toxicological information

Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur 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

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff	<u>S</u>	
Not available.		
General	Once sensitized, a severe allergic reaction may occur when subsequently export to very low levels.	sed
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Teratogenicity	Suspected of damaging the unborn child.	
Developmental effects	No known significant effects or critical hazards.	
Fertility effects	May damage fertility.	

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1630.2 mg/kg
Dermal	18580.3 mg/kg
Inhalation (vapours)	51.8 mg/l
Inhalation (dusts and mists)	33.84 mg/l

Section 12. Ecological information

Toxicity



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Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
2-piperazin-1-ylethylamine	Acute LC50 2190000 to 2460000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
bisphenol A	Acute EC50 1.506 mg/l	Algae - Prorocentrum minimum - Exponential growth phase	72 hours
	Acute EC50 9940 µg/l Fresh water	Daphnia - Daphnia magna - Young	48 hours
	Acute LC50 4.32 mg/l Marine water	Crustaceans - Tigriopus japonicus - Adult	48 hours
	Acute LC50 3.5 mg/l Marine water	Fish - Rivulus marmoratus - Embryo	96 hours
	Chronic NOEC 2 mg/l Fresh water	Algae - Chlorolobion braunii - Exponential growth phase	4 days
	Chronic NOEC 10 µg/l Marine water	Crustaceans - Tigriopus japonicus - Nauplii	21 days
	Chronic NOEC 0.86 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.2 µg/l Fresh water	Fish - Carassius auratus - Adult	90 days
4-nonylphenol, branched	Acute EC50 0.03 mg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 0.027 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute LC50 0.047 mg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 17 µg/l Marine water	Fish - Pleuronectes americanus - Larvae	96 hours
	Chronic EC10 0.012 mg/l Marine water Chronic NOEC 7.4 µg/l Fresh water	Algae - Skeletonema costatum Fish - Pimephales promelas - Embryo	96 hours 33 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
benzyl alcohol	0.87	-	low
2-piperazin-1-ylethylamine	-1.48	-	low
m-phenylenebis (methylamine)	0.18	2.691534803	low
bisphenol A	3.4	43.651583224	low
4-nonylphenol, branched	5.4	251.18864315	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods :	The generation of waste should be avoided or minimised where Disposal of this product, solutions and any by-products should a with the requirements of environmental protection and waste dis and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed contractor. Waste should not be disposed of untreated to the se compliant with the requirements of all authorities with jurisdiction should be recycled. Incineration or landfill should only be consid	t all times comply posal legislation waste disposal ewer unless fully n. Waste packaging
Date of issue/Date of revision	: 19/03/2018	AkzoNobel

Section 13. Disposal considerations

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, waterways, drains and sewers.

Section 14. Transport information

	ADR/RID	IMDG	ΙΑΤΑ	
UN number	UN1759	UN1759	UN1759	
UN proper shipping name CORROSIVE SOLID, N.O. S. (2-piperazin- 1-ylethylamine, m- phenylenebis (methylamine))		CORROSIVE SOLID, N.O. S. (2-piperazin- 1-ylethylamine, m- phenylenebis(methylamine)). Marine pollutant (4-nonylphenol, branched)	Corrosive solid, n.o.s. (2-piperazin-1-ylethylamine, m- phenylenebis(methylamine))	
Transport hazard class(es)	ard 8 8 8 8		8	
Packing group	111	III	111	
Environmental hazards	Yes.	Yes.	No.	
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Hazard identification number 80 Limited quantity 5 kg Special provisions 274 Tunnel code (E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-A, S-B Special provisions 223, 274	The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 25 kg Packaging instructions: 860 <u>Cargo Aircraft Only</u> Quantity limitation: 100 kg Packaging instructions: 864 <u>Limited Quantities -</u> <u>Passenger Aircraft</u> Quantity limitation: 5 kg Packaging instructions: Y845 <u>Special provisions</u> A3, A803	

IMDG Code Segregation : Not applicable. group

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.





Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Justification

Classi	fica	tion	Justification	
ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/IRRITATION - Category 1B SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION (Fertility) - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 2 ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 1		- Category 1B y 1 ertility) - Category 1B nborn child) - Category 2 tegory 1	Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method	
History			•	
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Date of issue/Date of revision	:	: 19/03/2018		
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Key to abbreviations	:	 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations 		
References	: Not available.			
Indicates information that	t ha	s changed from previous	sly issued version.	

Notice to reader



Section 16. Other information

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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