

## **SAFETY DATA SHEET**

#### **ENVIROLINE 376F-30 PART B**

## **Section 1. Identification**

ENVIROLINE 376F-30 PART B : GHS product identifier

NVA375 : Product code

Identified uses			
Professional application of coatings and inks			
Uses advised against Reason			
All Other Uses			

International Farg AB Holmedalen 3 Aspereds Industriomrade SE-424 22 Angered Sweden

+966 55 388 0087

sdsfellinguk@akzonobel.com

Tel: +46 (0) 31 928500 Fax: +46 (0) 31 928530

+46 8 33 12 31 : Emergency telephone

number (with hours of

: National advisory body/

: Supplier's details

operation)

Poison Centre (For use only

by licensed medical

professionals.)

: e-mail address of person responsible for this SDS

## Section 2. Hazards identification

FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1B
SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION (Fertility) - Category 1B
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
ACUTE AQUATIC HAZARD - Category 2
LONG-TERM AQUATIC HAZARD - Category 2

: Classification of the substance or mixture

#### **GHS label elements**









: Hazard pictograms

Danger : Signal word

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: Hazard statements

### Section 2. Hazards identification

Combustible liquid.

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May damage fertility.

Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

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. Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapour. 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. Do not breathe gas, vapour or spray.

Collect spillage. Get medical attention if you feel unwell. 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.

Dispose of contents and container in accordance with all local, regional, national

Store locked up. Store in a well-ventilated place. Keep cool.

and international regulations.

Wear appropriate respirator when ventilation is inadequate.

: Response

: Prevention

: Storage

: Disposal

: Supplemental label

elements

None known. : Other hazards which do not

result in classification

## Section 3. Composition/information on ingredients

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Mixture : Substance/mixture

Classification	CAS number	% by weight	Ingredient name
Acute Tox. 4, H302	135108-88-2	≥10 - ≤25	Formaldehyde, polymer with benzenamine, hydrogenated
Skin Corr. 1C, H314			
Skin Sens. 1, H317 STOT RE 2, H373 (oral)			
Aquatic Chronic 3, H412			
Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 2, H411	1761-71-3	≤10	4,4'-methylenebis(cyclohexylamine)
Acute Tox. 4, H302 Acute Tox. 4, H332	100-51-6	≤5	benzyl alcohol
STOT RE 1, H372	14808-60-7	≤3	crystalline silica, respirable powder
Flam. Liq. 3, H226	1330-20-7	≤3	xylene

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## Section 3. Composition/information on ingredients

-			_
Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Asp. Tox. 1, H304			
Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 2, H330 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335	111-40-0	≤3	2,2'-iminodiethylamine
Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 (Fertility) STOT SE 3, H335	80-05-7	≤3	bisphenol A
Acute Tox. 4, H302 Skin Corr. 1B, H314 Repr. 2, H361fd (Fertility and Unborn child) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	84852-15-3	<1	4-nonylphenol, branched
Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412	112-24-3	<1	3,6-diazaoctanethylenediamin

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**

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

: Eye contact

: Inhalation

: Skin contact

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### Section 4. First aid measures

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

: Ingestion

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Causes serious eye damage. : Eye contact

Harmful if inhaled. May give off gas, vapour or dust that is very irritating or corrosive : Inhalation to the respiratory system. Exposure to decomposition products may cause a health

hazard. Serious effects may be delayed following exposure.

Causes severe burns. May cause an allergic skin reaction. : Skin contact

Harmful if swallowed. May cause burns to mouth, throat and stomach. : Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following: : Eye contact

pain watering redness

Adverse symptoms may include the following: : Inhalation

reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Skin contact

pain or irritation redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Ingestion

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

#### Indication of immediate medical attention and special treatment needed, if necessary

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

No specific treatment. : Specific treatments

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.

: Protection of first-aiders

See toxicological information (Section 11)

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## **Section 5. Firefighting measures**

#### **Extinguishing media**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Do not use water jet.

: Suitable extinguishing media

: Unsuitable extinguishing media

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is 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.

: Specific hazards arising from the chemical

Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

: Hazardous thermal decomposition products

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

: Special protective actions for fire-fighters

: Special protective equipment for fire-fighters

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

: For non-emergency personnel

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".

: For emergency responders

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.

: Environmental precautions

#### Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Small spill explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Large spill explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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## Section 7. Handling and storage

#### Precautions for safe handling

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 breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

: Protective measures

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.

: Advice on general occupational hygiene

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

 Conditions for safe storage, including any incompatibilities

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Exposure limits	Ingredient name
ACGIH TLV (United States, 3/2015). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction	crystalline silica, respirable powder
ACGIH TLV (United States, 3/2015).  STEL: 651 mg/m³ 15 minutes.  STEL: 150 ppm 15 minutes.  TWA: 434 mg/m³ 8 hours.  TWA: 100 ppm 8 hours.	xylene
ACGIH TLV (United States, 3/2015). Absorbed through skin. TWA: 4.2 mg/m³ 8 hours. TWA: 1 ppm 8 hours.	2,2'-iminodiethylamine

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

: Appropriate engineering controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

: Environmental exposure controls

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## Section 8. Exposure controls/personal protection

#### **Individual protection measures**

Wash hands, forearms and face thoroughly after handling chemical products, before : Hygiene measures 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.

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 required instead.

: Eye/face protection

#### Skin 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.

: Hand 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.

: Body 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.

: Other skin protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

: Respiratory protection

## Section 9. Physical and chemical properties

#### <u>Appearance</u>

Liquid. : Physical state Off-white. : Colour

Solvent. Odour

Not available. Odour threshold

Not applicable. : pH

: Melting point Not available. Lowest known value: >220°C (>428°F)(Formaldehyde, polymer with benzenamine, : Boiling point

hydrogenated).

Closed cup: 66°C (150.8°F) : Flash point

Not available. : Evaporation rate

Not available. : Flammability (solid, gas) Not available.

: Lower and upper explosive (flammable) limits

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## Section 9. Physical and chemical properties

Not available. : Vapour pressure

Not available. : Vapour density

1.67 : Relative density

Insoluble in the following materials: cold water. : Solubility

Not available. : Partition coefficient: n-

octanol/water

Not available. : Auto-ignition temperature

Not available. : Decomposition temperature

Kinematic (room temperature): 2124 mm<sup>2</sup>/s (2124 cSt) : Viscosity

## Section 10. Stability and reactivity

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

The product is stable. : Chemical stability

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

reactions

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Conditions to avoid

Reactive or incompatible with the following materials:

oxidizing materials

: Incompatible materials

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Hazardous decomposition

products

## **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Exposure	Dose	Species	Result	Product/ingredient name
4 hours	>4178 mg/l	Rat	LC50 Inhalation Vapour	benzyl alcohol
_	2000 mg/kg	Rabbit	LD50 Dermal	
_	1620 mg/kg	Rat	LD50 Oral	
_	4300 mg/kg	Rat	LD50 Oral	xylene
4 hours	0.07 mg/l	Rat	LC50 Inhalation Dusts and mists	2,2'-iminodiethylamine
_	1090 mg/kg	Rabbit	LD50 Dermal	,
_	1080 mg/kg	Rat	LD50 Oral	
_	1200 mg/kg	Rat	LD50 Oral	bisphenol A
-	1300 mg/kg	Rat	LD50 Oral	4-nonylphenol, branched
_	805 mg/kg	Rabbit	LD50 Dermal	3,
				6-diazaoctanethylenediamin
_	2500 mg/kg	Rat	LD50 Oral	, , , , , , , , , , , , , , , , , , , ,

#### **Irritation/Corrosion**

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	24 hours 10 microliters	-	Rabbit	Eyes - Severe irritant	4,4'-methylenebis (cyclohexylamine)
	48 hours 16 milligrams	-	Man	Skin - Mild irritant	benzyl alcohol
-	100 Percent	-	Pig	Skin - Moderate irritant	
-	24 hours 100 milligrams	-	Rabbit	Skin - Moderate irritant	
-	500	-	Rabbit	Skin - Moderate irritant	2,2'-iminodiethylamine

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## Section 11. Toxicological information

	milligrams				
-	24 hours 250	-	Rabbit	Eyes - Severe irritant	bisphenol A
	Micrograms				
	24 hours 500	-	Rabbit	Skin - Mild irritant	
	milligrams				
	250	-	Rabbit	Skin - Mild irritant	
	milligrams				
-	100	-	Rabbit	Eyes - Severe irritant	4-nonylphenol, branched
	milligrams				
	24 hours 500	-	Rabbit	Skin - Severe irritant	
	milligrams		5		
	24 hours 20	-	Rabbit	Eyes - Moderate irritant	3,
	milligrams		D 11.11		6-diazaoctanethylenediamin
	49 milligrams	-	Rabbit	Eyes - Severe irritant	
	24 hours 5	-	Rabbit	Skin - Severe irritant	
	milligrams		D 11.11		
	490	_	Rabbit	Skin - Severe irritant	
	milligrams				

#### **Sensitisation**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Target organs	Route of exposure	Category	Name	
Respiratory tract irritation	Not applicable.	Category 3	xylene	
Respiratory tract irritation	Not applicable.	Category 3	2,2'-iminodiethylamine	
Respiratory tract irritation	Not applicable.	Category 3	bisphenol A	

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

Target organs	Route of exposure	Category	Name
Not determined	Oral	Category 2	Formaldehyde, polymer with benzenamine, hydrogenated
Not determined	Oral	Category 2	4,4'-methylenebis(cyclohexylamine)
Not determined	Not determined	Category 1	crystalline silica, respirable powder

#### **Aspiration hazard**

Result	Name
ASPIRATION HAZARD - Category 1	xylene

Not available. : Information on likely routes of exposure

#### Potential acute health effects

Causes serious eye damage. : Eye contact

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## **Section 11. Toxicological information**

Harmful if inhaled. May give off gas, vapour or dust that is very irritating or corrosive : Inhalation

to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Causes severe burns. May cause an allergic skin reaction. : Skin contact

Harmful if swallowed. May cause burns to mouth, throat and stomach. : Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following: : Eye contact

pain watering redness

Adverse symptoms may include the following: : Inhalation

reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Skin contact

pain or irritation redness blistering may occur reduced foetal weigh

reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Ingestion

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** 

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

Long term exposure

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

Potential chronic health effects

Not available.

Causes damage to organs through prolonged or repeated exposure. Once : General

sensitized, a severe allergic reaction may occur when subsequently exposed to very

low levels.

No known significant effects or critical hazards. : Carcinogenicity

No known significant effects or critical hazards. : Mutagenicity

Suspected of damaging the unborn child. : Teratogenicity

No known significant effects or critical hazards. : Developmental effects

May damage fertility. : Fertility effects

Numerical measures of toxicity

**Acute toxicity estimates** 

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## Section 11. Toxicological information

ATE value	Route	
1921.1 mg/kg	Oral	
23837.7 mg/kg	Dermal	
155.2 mg/l	Inhalation (vapours)	
3.052 mg/l	Inhalation (dusts and mists)	

## Section 12. Ecological information

#### **Toxicity**

Exposure	Species	Result	Product/ingredient name
48 hours	Crustaceans - Palaemonetes	Acute LC50 8500 µg/l Marine water	xylene
	pugio		
96 hours	Fish - Pimephales promelas	Acute LC50 13400 µg/l Fresh water	
72 hours	Algae - Prorocentrum minimum -	Acute EC50 1.506 mg/l	bisphenol A
	Exponential growth phase		
48 hours	Daphnia - Daphnia magna -	Acute EC50 9940 μg/l Fresh water	
	Young		
48 hours	Crustaceans - Tigriopus	Acute LC50 4.32 mg/l Marine water	
	japonicus - Adult		
96 hours	Fish - Rivulus marmoratus -	Acute LC50 3.5 mg/l Marine water	
	Embryo		
4 days	Algae - Chlorolobion braunii -	Chronic NOEC 2 mg/l Fresh water	
	Exponential growth phase		
21 days	Crustaceans - Tigriopus	Chronic NOEC 10 µg/l Marine water	
	japonicus - Nauplii		
21 days	Daphnia - Daphnia magna -	Chronic NOEC 0.86 mg/l Fresh water	
	Neonate		
90 days	Fish - Carassius auratus - Adult	Chronic NOEC 0.2 µg/l Fresh water	
72 hours	Algae - Skeletonema costatum	Acute EC50 0.03 mg/l Marine water	4-nonylphenol, branched
96 hours	Algae - Skeletonema costatum	Acute EC50 0.027 mg/l Marine water	
48 hours	Crustaceans - Americamysis	Acute LC50 0.047 mg/l Marine water	
	bahia - Juvenile (Fledgling,		
	Hatchling, Weanling)		
96 hours	Fish - Pleuronectes americanus	Acute LC50 17 µg/l Marine water	
	- Larvae		
96 hours	Algae - Skeletonema costatum	Chronic EC10 0.012 mg/l Marine water	
33 days	Fish - Pimephales promelas -	Chronic NOEC 7.4 µg/l Fresh water	
	Embryo		
96 hours	Algae - Pseudokirchneriella	Acute EC50 3700 μg/l Fresh water	3,
	subcapitata		6-diazaoctanethylenediamin
48 hours	Daphnia - Daphnia magna	Acute LC50 33900 μg/l Fresh water	

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Potential	BCF	LogPow	Product/ingredient name
low	-	2.03	4,4'-methylenebis (cyclohexylamine)
low	-	0.87	benzyl alcohol
low	8.1 to 25.9	3.12	xylene
low	4.466835921	-5.58	2,2'-iminodiethylamine
low	43.651583224	3.4	bisphenol A
low	251.18864315	5.4	4-nonylphenol, branched
low	-	-1.66 to -1.4	3,

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# Section 12. Ecological information 6-diazaoctanethylenediamin

#### **Mobility in soil**

Not available. : Soil/water partition coefficient (Koc)

No known significant effects or critical hazards.

#### : Other adverse effects

## Section 13. Disposal considerations

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

: Disposal methods

## **Section 14. Transport information**

IATA	IMDG	UN	
UN3066	UN3066	UN3066	UN number
PAINT	PAINT. Marine pollutant (4,4'-methylenebis (cyclohexylamine))	PAINT	UN proper shipping name
8	8	8	Transport hazard class(es)
II	II	II	Packing group
No.	Yes.	No.	Environmental hazards
The environmentally hazardous substance mark may appear if required by other transportation regulations.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	-	Additional information

Not applicable. : IMDG Code Segregation group

**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.

: Special precautions for user

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## **Section 14. Transport information**

Not available.

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

## **Section 15. Regulatory information**

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Safety, health and environmental regulations specific for the product

#### Section 16. Other information

#### **Justification**

Justification	Classification
On basis of test data	Flam. Liq. 4, H227
Calculation method	Acute Tox. 4, H302
Calculation method	Acute Tox. 4, H332
Calculation method	Skin Corr. 1B, H314
Calculation method	Skin Sens. 1, H317
Calculation method	Repr. 1B, H360 (Fertility)
Calculation method	Repr. 2, H361 (Unborn child)
Calculation method	STOT RE 1, H372
Calculation method	Aquatic Acute 2, H401
Calculation method	Aquatic Chronic 2, H411

#### **History**

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: Version

ATE = Acute Toxicity Estimate : Key to abbreviations

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate 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)

**UN = United Nations** 

Not available. : References

Indicates information that has changed from previously issued version.

#### **Notice to reader**

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.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out

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### **Section 16. Other information**

of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Unless we have agreed to the contrary, all products are supplied by us subject to our standard terms and conditions of business, which include limitations of liability. Please make sure to refer to these and / or the relevant agreement which you have with AkzoNobel (or its affiliate, as the case may be).

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