

**Product:** SYNOLAC® O3X

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SDS No.: 217313-001 (Version 1.0)

Date 20.12.2016

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Identification of the mixture:** SYNOLAC® O3X

**Recommended use of the chemical and restrictions on use :**

**Use of the Substance/Mixture :** Paints, lacquers and varnishes industry

**Company/Undertaking Identification:**

**Manufacturer** ARKEMA COATING RESINS MALAYSIA SDN BHD  
PLO 491, Jalan Keluli, Pasir Gudang Industrial Estate  
81700 Pasir Gudang, Johor, Malaysia  
Telephone: +60 7 253 66 88  
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**Importer** ARKEMA Pte Ltd  
10 Science Park Road  
#01-01A The Alpha  
Singapore Science Park II  
117684, Singapore  
Telephone: (65) 64199199  
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**Emergency telephone number** NCEC Emergency CARECHEM 24: +65 3158 1074

**2. HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture:**

Flammable liquid, Category 3, H226  
Skin irritation, Category 2, H315  
Specific target organ toxicity - single exposure, Category 3, H335  
Inhalation: Specific target organ toxicity - repeated exposure, Category 2, H373

**Additional information:**

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2. Label elements:**

**GHS-Labeling**

Hazard pictograms:



Signal word: **Warning**

Hazard statements:

H226 : Flammable liquid and vapour.  
H315 : Causes skin irritation.  
H335 : May cause respiratory irritation.  
H373 : May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements:

**Prevention:**

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P260 : Do not breathe gas/mist/vapours/spray.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P303 + P361 + P353 : IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P312 : Call a POISON CENTER/doctor if you feel unwell.

**Storage:**

P403 + P233 : Store in a well-ventilated place. Keep container tightly closed.

**2.3. Other hazards:**

**Potential health effects:**

Inhalation: At high vapour/fog concentrations : Irritation of upper respiratory system Risk of : headache Dizziness Stomach/intestinal disorders Drowsiness Nausea

Eye contact: Slightly irritating to eyes.

Ingestion: At high dose : Risk of : Nausea Vomiting Gastrointestinal problems Neurological disorders

**Environmental Effects:**

Toxic to aquatic organisms.

**Physical and chemical hazards:**

Flammable liquid Thermal decomposition giving toxic products

Decomposition products: See chapter 10

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is a mixture.

**Chemical nature of the mixture<sup>1</sup>:**

Preparation based on : Alkyd resins

**Hazardous components:**

Chemical name <sup>1</sup>	EC-No.	CAS-No.	Concentration	Classification
Xylene	215-535-7	1330-20-7	< 30 %	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 5 (Oral); H303 Acute Tox. 4 (Dermal); H312 Acute Tox. 4 (Inhalation); H332 Skin Irrit. 2; H315 STOT SE 3 (Inhalation); H335 Aquatic Acute 2; H401

**Hazardous impurities :**

Chemical name <sup>1</sup>	EC-No.	CAS-No.	Concentration	Classification
Ethylbenzene	202-849-4	100-41-4	< 20 %	Flam. Liq. 2; H225 Acute Tox. 5 (Oral); H303 Acute Tox. 4 (Inhalation); H332 Asp. Tox. 1; H304 Skin Irrit. 3; H316 STOT RE 2 (Inhalation); H373 Aquatic Acute 2; H401 Aquatic Chronic 3; H412

<sup>1</sup>: See chapter 14 for Proper Shipping Name

**4. FIRST AID MEASURES**

**4.1. Description of necessary first-aid measures:**

**General advice:**

Take off immediately all contaminated clothing (including shoes).

**Inhalation:**

Move patient from contaminated area to fresh air. Oxygen or artificial respiration if needed. In case of problems : Consult a physician.

**Skin contact:**

Wash immediately, abundantly and thoroughly with soap and water. If skin irritation occurs, seek medical advice/attention.

**Eye contact:**

Wash open eyes immediately, abundantly and thoroughly for at least 15 minutes. Seek advice of an ophthalmologist if necessary.

**Ingestion:**

Do NOT induce vomiting. Call a physician or Poison Control Center immediately.

**Protection of first-aiders:**

Protective suit. In case of insufficient ventilation, wear suitable respiratory equipment.

**4.2. Most important symptoms/effects, acute and delayed:** No data available.

**4.3. Indication of immediate medical attention and special treatment needed, if necessary:** No data available.

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## 5. FIREFIGHTING MEASURES

### 5.1. Extinguishing media:

**Suitable extinguishing media:**

Water spray, Water mist, powder, foam, Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media:**

High volume water jet

### 5.2. Specific hazards arising from the chemical:

Flammable liquid

Vapours are heavier than air and may spread along floors.

Vapours may form explosive mixtures with air.

thermal decomposition into harmful products

Irritating or toxic vapors.

Formation of toxic products through combustion:, Carbon oxides

### 5.3. Advice for firefighters:

**Specific methods:**

In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Do not allow run-off from fire fighting to enter drains or water courses.

**Special protective actions for fire-fighters:**

In the event of fire, wear self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Prohibit all sources of sparks and ignition  
- Do not smoke. Avoid contact with the skin and the eyes. Avoid inhalation of vapours. In case of insufficient ventilation, wear suitable respiratory equipment.

### 6.2. Environmental precautions:

Do not let product enter drains. Do not flush into surface water. Do not release into the environment. Local authorities should be advised if significant spillages cannot be contained.

### 6.3. Methods and materials for containment and cleaning up:

**Recovery:**

Shovel into suitable container for disposal. Never return spills in original containers for re-use. Absorb the remainder with an inert absorbent material (sand, vermiculite, perlite). No sparking tools should be used.

**Elimination:** See chapter 13

**6.4. Reference to other sections:** None.

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## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling:

**Technical measures/Precautions:**

Storage and handling precautions applicable to products: Liquid. Flammable. Irritant. Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths Provide water supplies near the point of use. Provide electrical earthing of equipment.

**Safe handling advice:**

Prohibit all sources of sparks and ignition - Do not smoke. Take precautionary measures against static discharges. In case of insufficient ventilation, wear suitable respiratory equipment.

**Hygiene measures:**

Take off immediately all contaminated clothing. Avoid contact with the skin and the eyes. Avoid inhalation of vapours. When using do not eat, drink or smoke.  
Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

**7.2. Conditions for safe storage, including any incompatibilities:**

Keep tightly closed in a dry, cool and well-ventilated place. Store in original container. Store away from heat and ignition sources. Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres. Avoid long storage period. Keep away from direct sunlight. Provide a catch-tank in a bunded area.

Storage period: < 12 Months, Storage temperature: < 30 °C

**Incompatible products:**

Acids Oxidizing agents

**Packaging material:**

**Recommended:** Metals

**To be avoided:** Plastic materials

**7.3. Specific end use(s):** None.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters:**

**Exposure Limit Values**

**Xylene**

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
SG OEL	2006	TWA	100	434	-
SG OEL	2006	STEL	150	651	-
ACGIH (US)	02 2012	TWA	100	-	-
ACGIH (US)	02 2012	STEL	150	-	-

**Ethylbenzene**

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
SG OEL	2006	TWA	100	434	-
SG OEL	2006	STEL	125	543	-
ACGIH (US)	02 2012	TWA	20	-	-

**8.2. Exposure controls:**

**Appropriate engineering controls:**

Frequently monitor and control the working atmosphere.  
Provide appropriate exhaust ventilation at machinery.

**Personal protective equipment:**

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.  
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection:

Splashes:  
PVA Glove thickness: 0.2 - 0.3 mm  
According to permeation index EN 374: 6 (time elapsed > 480 mins)  
Gloves nitrile rubber Glove thickness: 0.38 mm  
According to permeation index EN 374: 2 (time elapsed > 30 mins)  
Prolonged contact:  
Viton (R) Glove thickness: 0.7 mm  
According to permeation index EN 374: 6 (time elapsed > 480 mins)  
Polyethylene Glove thickness: 0.062 mm  
According to permeation index EN 374: 6 (time elapsed > 480 mins) PE gloves being not ergonomic and not mechanically resistant, have to be used under other gloves offering a good grip and mechanical resistance.  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., When handling hot material, use heat resistant gloves.

Eye/face protection:

Safety glasses with side-shields

Skin and body protection:

Protective suit.

**Environmental exposure controls:** See chapter 6

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

**Appearance:**

<b>Physical state (20°C):</b>	liquid
<b>Colour:</b>	colourless
<b>Odour:</b>	solvent-like
<b>Olfactory threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/range:</b>	No data available. 135 °C
<b>Flash point:</b>	27 °C (ASTM D 93)
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	
Lower flammable limit :	1.00 %(V)
Upper flammable limit :	6.60 %(V)
<b>Vapour pressure:</b>	No data available.
<b>Vapour density:</b>	No data available.
<b>Density:</b>	1.06 g/cm <sup>3</sup> , at 25 °C
<b>Water solubility:</b>	insoluble
<b>Partition coefficient: n-octanol/water:</b>	XYLENE : log Kow : 3.01 - 3.21 , at 20 °C ETHYLBENZENE : log Kow : 3.6 , at 20 °C (OECD Test Guideline 117)
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity, dynamic:</b>	6,600 - 8,600 mPa.s , at 25 °C (ISO 2555)
<b>Explosive properties:</b>	
Explosivity:	Not relevant (due to the chemical structure)
<b>Oxidizing properties:</b>	Not relevant (due to the chemical structure)

### 9.2. Other data:

**Solubility in other solvents:** Soluble in most organic solvents

## 10. STABILITY AND REACTIVITY

**10.1. Reactivity:** No data available.

**10.2. Chemical stability:**

The product is stable under normal handling and storage conditions.

**10.3. Possibility of hazardous reactions:**

None under normal conditions of use.

**10.4. Conditions to avoid:**

Store protected from moisture and heat. Remove all sources of ignition.

**10.5. Incompatible materials to avoid:**

Acids, Oxidizing agents

**10.6. Hazardous decomposition products:**

thermal decomposition into harmful products  
Irritating or toxic vapors.  
Formation of toxic products through combustion:, Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

### 11.1. Information on toxicological effects:

#### Acute toxicity:

- Inhalation:** **According to its composition : May be harmful if inhaled.**
- XYLENE :  
• In man : At high concentrations, Risk of, headache, Drowsiness, Dizziness, Nausea, Stomach/intestinal disorders  
LC50/4 h/Rat: 29 mg/l (Method: OECD Test Guideline 403) (vapour)
- In animals :  
LC50/4 h/Rat: 29 mg/l (Method: OECD Test Guideline 403) (vapour)
- ETHYLBENZENE :  
• In man : Effects of breathing high concentrations of vapour may include:, headache, Drowsiness, Dizziness, Possible loss of consciousness  
LC50/4 h/Rat: 17.4 mg/l ( 4000 ppm) (vapour)
- In animals :  
LC50/4 h/Rat: 17.4 mg/l ( 4000 ppm) (vapour)
- Ingestion:** **Based on the available information, it is not possible to conclude on the hazard potential of this product.**
- XYLENE :  
• In man : The effects of ingesting a large dose can include :, Nausea, Gastrointestinal disturbance, Vomiting, Central nervous system depression  
LD50/Rat: = 4,300 mg/kg (Method: OECD Test Guideline 401)
- In animals :  
LD50/Rat: = 4,300 mg/kg (Method: OECD Test Guideline 401)
- ETHYLBENZENE :  
• In animals : LD50/Rat: 3,500 - 4,700 mg/kg
- Dermal:** **According to its composition : May be harmful in contact with skin.**
- XYLENE :  
• In animals : LD50/Rabbit: > 4,200 mg/kg
- ETHYLBENZENE :  
• In animals : LD50/Rabbit: 15,400 mg/kg

#### Local effects ( Corrosion / Irritation / Serious eye damage ):

- Skin contact:** **From its composition, it must be considered as: Irritating to skin.**
- XYLENE :  
(Results obtained on a similar product).  
• In animals : Skin irritation (Draize Test, Rabbit, Exposure time: 24 h)
- ETHYLBENZENE :  
• In animals : Moderately irritant for skin (Rabbit, Exposure time: 24 h)
- Eye contact:** **According to its composition, can be considered as : Slightly irritating to eyes.**
- XYLENE :  
(Results obtained on a similar product).  
• In animals : Mild eye irritation (Draize Test, Rabbit)
- ETHYLBENZENE :  
• In animals : Mild eye irritation (Draize Test, Rabbit)

#### Respiratory or skin sensitisation:

- Inhalation:** No data available.
- Skin contact:** **None of the product and /or component quoted in section 3 and/or analogue substance/metabolite is classified as skin sensitizer.**

#### CMR effects :

- Mutagenicity:** **Results from in vitro and in vivo tests do not lead to considering the product as genotoxic**

**In vitro**

**XYLENE :**

(Results obtained on a similar product)., Inactive in genotoxic in vitro tests  
In vitro gene mutation study in bacteria: (Method: OECD Test Guideline 471)  
In vitro gene mutations test on mammalian cells: (Method: OECD Test Guideline 476)  
Tests for chromosome aberrations in vitro on mammalian cells: (Method: OECD Test Guideline 473)

**ETHYLBENZENE :**

In vitro gene mutation study in bacteria: Inactive (Method: OECD Test Guideline 471)  
In vitro test for chromosomal abnormalities on CHO cells: Inactive (Method: OECD Test Guideline 473)  
In vitro gene mutations test on mammalian cells: Active (Method: OECD Test Guideline 476)

**In vivo**

**ETHYLBENZENE :**

Micronucleus test in vivo mouse: Inactive (Method: OECD Test Guideline 474)  
DNA repair test on rats hepatocytes: Inactive (Method: OECD Test Guideline 482)

**Carcinogenicity:**

**Based on the available data, the substance is not suspected of having carcinogenic potential**

**XYLENE :**

• In animals :

(Results obtained on a similar product)., Absence of carcinogenic effects (Method: OECD Test Guideline 451, rat, mouse, lifetime, By oral route)

**ETHYLBENZENE :**

• In animals :

Slight carcinogenic effects in animals (By inhalation)  
Target organs: Kidney (Method: OECD Test Guideline 453, Rat)  
Target organs: Liver, Lungs (Method: OECD Test Guideline 451, Mouse)

**Reproductive toxicity:**

**Fertility:**

**Based on the available data, the substance is not suspected of having reprotoxic potential.**

**XYLENE :**

• In animals :

Reproduction Test: (Results obtained on a similar product)., Absence of toxic effects on fertility  
NOAEL ( Parental toxicity ): >= 500 ppm  
NOAEL ( Fertility ): >= 500 ppm  
NOAEL ( Developmental Toxicity ): >= 500 ppm  
(Rat, By inhalation) (vapour)

**ETHYLBENZENE :**

• In animals :

Two generation reproduction study: No toxic effects for reproduction  
NOAEL ( Parental toxicity ): > 500 ppm  
NOAEL ( Fertility ): > 500 ppm  
NOAEL ( Developmental Toxicity ): > 500 ppm  
(Method: OECD Test Guideline 416, Rat, By inhalation) (vapour)

**Foetal development:**

**Based on the available data, the substance is not suspected of having developmental toxicity potential.**

**XYLENE :**

• In animals :

Exposure during pregnancy: (Results obtained on a similar product)., Absence of toxic effects for foetal development at non toxic maternal doses, No teratogenic effects  
NOAEL ( Developmental Toxicity ): approximately 500 ppm  
NOAEL ( Maternal Toxicity ): 500 ppm  
(Method: OECD Test Guideline 414, Rat, By inhalation)

**ETHYLBENZENE :**

• In animals :

Exposure during pregnancy  
(Method: OECD Test Guideline 414, By inhalation)  
Absence of toxic effects for foetal development at non toxic maternal doses, No teratogenic effects  
NOAEL ( Developmental Toxicity ): 500 ppm  
NOAEL ( Maternal Toxicity ): 500 ppm  
(Rat)  
Absence of toxic effects for foetal development.  
NOAEL ( Developmental Toxicity ): > 1,000 ppm  
NOAEL ( Maternal Toxicity ): > 1,000 ppm  
(Rabbit)

**Specific target organ toxicity :**

**Single exposure :**

**The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.**

**Inhalation:**

XYLENE :

At high vapour/mist concentrations , Irritating to respiratory system.

ETHYLBENZENE :

- In man :
- In animals :

At high vapour/mist concentrations , Risk of irritation of eyes and respiratory system  
Decrease of respiratory frequency by 50 % , Mouse (6.2 mg/l)

**Repeated exposure:**

**The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.**

XYLENE :

(Results obtained on a similar product).

- In animals :

By oral route: No toxic effect directly extrapolated to humans  
increased organ weight, Target organs: Target organs at high concentrations:, Liver, Kidney, NOAEL= 150 mg/kg (Method: OECD Test Guideline 408, Rat, 3 months)  
By inhalation: No specific toxic effects  
NOAEL= > 3.5 mg/l (rat, dog, 3 months)

ETHYLBENZENE :

- In animals :

By inhalation: hearing impairment, Target organs: Auditory system (Rat, Repeated)

- In animals :

Target organs: Kidney, Thyroid gland, Liver, Lungs

By inhalation: NOAEL= 4.3 mg/l (1000ppm) (Method: OECD Test Guideline 413, rat, mouse, 13 Weeks)

By inhalation: NOAEL= 1.1 mg/l (250ppm) (Method: OECD Test Guideline 453, Rat, 2 y)

By inhalation: NOAEL= 0.3 mg/l (75ppm) (Method: OECD Test Guideline 451, Mouse, 2 y)

- In animals :

By oral route: Target organs: Haematological system, Liver, Kidney, NOAEL= 75mg/kg bw/day, LOAEL= 250mg/kg bw/day (Method: OECD Test Guideline 408, Rat, 13 Weeks)

**Aspiration hazard:**

Not applicable

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**12. ECOLOGICAL INFORMATION**

Ecotoxicology Assessment:

All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

**12.1. Acute toxicity :**

**Fish:**

**According to its composition, can be considered as : , Toxic to fish.**

XYLENE :

LC50, 96 h (Oncorhynchus mykiss) : 2.6 mg/l (Method: OECD Test Guideline 203)

ETHYLBENZENE :

LC50, 96 h (Oncorhynchus mykiss) : 4.2 mg/l (Method: OECD Test Guideline 203)

**Aquatic invertebrates:**

**According to its composition, can be considered as : , Toxic to daphnia.**

XYLENE :

IC50, 24 h (Daphnia magna (Water flea)) : 1 mg/l (Method: OECD Test Guideline 202)

ETHYLBENZENE :

EC50, 48 h (Daphnia magna (Water flea)) : 1.8 - 2.4 mg/l (Method: US EPA)

**Aquatic plants:**

**According to its composition, can be considered as : , Toxic to algae.**

XYLENE :

ErC50, 72 h (Pseudokirchneriella subcapitata) : 4.36 mg/l (Method: OECD Test Guideline 201)

ETHYLBENZENE :

EC50, 72 h (Pseudokirchneriella subcapitata (green algae)) : 5.4 mg/l (Method: US EPA)

**Microorganisms:**

XYLENE :

NOEC, 3 h (Activated sludge) : 157 mg/l (Method: OECD Test Guideline 209, Respiration inhibition)

ETHYLBENZENE :

EC50, 24 h (Nitrosomonas sp) : 96 mg/l



**Aquatic toxicity / Long term toxicity:**

**Aquatic invertebrates:**

ETHYLBENZENE :  
NOEC, 7 d (Ceriodaphnia dubia) : 0.96 mg/l (reproduction)

**Aquatic plants:**

XYLENE :  
ErC10, 72 h (Pseudokirchneriella subcapitata) : 1.9 mg/l (Method: OECD Test Guideline 201)

ETHYLBENZENE :  
NOEC, 96 h (Pseudokirchneriella subcapitata (green algae)) : 3.4 mg/l (Method: US EPA)

**12.2. Persistence and degradability :**

**Biodegradation (In water):** **Based on the available information, it is not possible to conclude on the hasard potential of this mixture.**

XYLENE :  
Readily biodegradable: 69 - 87 % (Method: OECD Test Guideline 301 F)

ETHYLBENZENE :  
Readily biodegradable: 70 - 80 % after 28 d (Method: OECD Test Guideline 310)

**12.3. Bioaccumulative potential :**

**Bioaccumulation:** **Based on the available information, it is not possible to conclude on the hasard potential of this mixture.**

XYLENE :  
Partition coefficient: n-octanol/water: log Kow : 3.01 - 3.21 , at 20 °C

ETHYLBENZENE :  
Partition coefficient: n-octanol/water: log Kow : 3.6 , at 20 °C (Method: OECD Test Guideline 117)

XYLENE :  
Bioconcentration factor (BCF): 25.9 (56 d, 12 °C, Method: measured, Oncorhynchus mykiss (rainbow trout))

ETHYLBENZENE :  
Bioconcentration factor (BCF): 1 (42 d, 10 °C, Method: measured, Fish)

**12.4. Mobility in soil - Distribution among environmental compartments:**

**Absorption / desorption:** **Based on the available information, it is not possible to conclude on the hasard potential of this mixture.**

XYLENE :  
log Koc: 1.57 - 3.17

ETHYLBENZENE :  
log Koc: 2.65 - 2.73 ( Method: calculated )

**12.5. Results of PBT and vPvB assessment :**

This information is not required.

**12.6. Other adverse effects:** None known.

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**13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment:**

**Disposal of product:** The product should not be allowed to enter drains, water courses or the soil. Dispose of contents/ container to an approved waste disposal plant. In accordance with local and national regulations.

**Disposal of packaging:** Recycle if possible.

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**14. TRANSPORT INFORMATION**

Regulation	14.1. UN number	14.2. UN proper shipping name	14.3. Class*	Label	14.4. PG*	14.5. Environmental hazards	14.6. Special precautions for user
IATA Cargo	1866	Resin solution	3	3	III	no	
IATA Passenger	1866	Resin solution	3	3	III	no	
IMDG	1866	RESIN SOLUTION	3	3	III	no	EmS Number: F-E, S-E

\*Description: 14.3. Transport hazard class(es)  
14.4. Packing group

14.7. **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

## 15. REGULATORY INFORMATION

Not listed	Stockholm Convention on Persistent Organic Pollutants (POPs)
Not listed	Montreal Protocol. Substances that Deplete the Ozone Layer, as amended
Not listed	Kyoto Protocol to the United Nations Framework Convention on Climate Change, Annex A, Greenhouse Gases
Not listed	Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
Not listed	International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors
Not listed	Singapore. Hazardous Substances Control List (Environmental Protection and Management Act, Second Schedule, Part 1, Control of Hazardous Substances)

### INVENTORIES:

EINECS: Conforms to  
TSCA: Conforms to  
DSL: All components of this product are on the Canadian DSL  
IECSC (CN): Conforms to  
PICCS (PH): Conforms to  
AICS: Conforms to  
NZIOC: Conforms to

## 16. OTHER INFORMATION

### Full text of H, EUH-phrases referred to under sections 2 and 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

### Update:

Safety datasheet sections which have been updated:		Type:
2	Label, Most important hazards	Revisions
3	Composition/information on ingredients	Revisions
7	Technical measures/Precautions	Additions
8	Hand protection	Additions
9	Viscosity	Additions
11	11. TOXICOLOGICAL INFORMATION	Revisions
12	12. ECOLOGICAL INFORMATION	Revisions
15	Inventories	Revisions

### Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL)  
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)  
bw : Body weight  
food : oral feed  
dw : Dry weight

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and

codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

**NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).**

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