

Conforms to regulation (EC) 1907/2006 (REACH), annex II as amended by Regulation (EU) 453/2010

SAFETY DATA SHEET

Aperture Top Coat

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

1.1 Product Identifier

Trade Name **Aperture Top Coat**

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

Industrial uses: Liquid applied roof and wall aperture waterproofing

Professional uses: Liquid applied roof and wall aperture waterproofing

Uses advised against: Product is not for consumer use

1.3 Details of the supplier of the safety data sheet

Aperture Limited

Richmond Road

Trafford Park

Manchester

M17 1RE

Tel: +44 (0) **161 7721750**

Fax: +44 (0) **161 7721751**

Email: <mailto:msds@polyroof.co.uk> cpeers@aperturesp.co.uk

1.4 Emergency Telephone number

+44 (0) 161 7721750 (office hours)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

STOT RE 2, H373

Aquatic Chronic 3, H412

See Section 16 for the full text of the H statements declared above.

2.2 Label elements

Hazard pictograms:



Signal word: Warning

Hazard Statements

Flammable liquid and vapour.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure if inhaled.

Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

Do not breathe vapour.

Wear protective gloves and eye protection: fluor rubber butyl rubber gloves-Safety glasses with side shields.

Do not breathe vapour or spray.

Avoid release to the environment

Response:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs:

Get Medical attention

Supplement Statements

Contains isocyanates. May produce an allergic reaction

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

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

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredient Name	Concentration %	Regulation (EC) No. 1272/2008 [CLP]
aromatic polyisocyanate prepolymer n.o.s.	15-<20	Skin Sens. 1, H317
2-methoxy-1-methylethyl Acetate REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	5-<10	Flam. Liq. 3, H226
isophorondiisocyanate, homopolymer EC: 500-125-5 CAS: 53880-05-0	1-<5	Skin Sens. 1, H317
2-ethylhexyl (3-isocyanatomethylphenyl)-Carbamate EC: 261-180-6 CAS: 58240-57-6	1-< 5	Skin Irrit. 2, H315
hydrocarbons, aromatic, C9 REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4	2.5 - < 5	Flam. Liq. 3, H226 STOT SE 3, H335 and H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
quartz, respirable fraction EC: 238-878-4 CAS: 14808-60-7	<10	STOT RE 1, H372
xylene (mixture of isomers) REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	1 -< 5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315
3-butyl-2-(1-ethylpentyl)oxazolidine EC: 425-660-0 CAS: 165101-57-5	1 - < 5	Skin Corr. 1B, H314 Eye Dam. 1, H318
antimony trioxide REACH #: 01-2119475613-35 EC: 215-175-0 CAS: 1309-64-4 Index: 051-005-00-X	0.1 - <1	Carc. 2, H351
pentamethyl-4-piperidyl sebacate REACH #: 01-2119491304-40 EC: 255-437-1 CAS: 41556-26-7	<0.25	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
tri-(2-methoxyethoxy)vinylsilane EC: 213-934-0 CAS: 1067-53-4	<0.5	Repr. 2, H361f

Refer to Section 16 for additional wording

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye Contact

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel

Skin Contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners

Ingestion

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of First Aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most Important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

Repeated or prolonged contact with irritants may cause dermatitis.

Contains aromatic polyisocyanate prepolymer n.o.s., 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers, reaction product of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecanamide) 12-hydroxy-N-[2-[(1-oxohexyl) amino]ethyl]octadecanamide and N,N'-ethane-1,2-diylbis(hexanamide), bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate.
May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

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

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents

Recommended: alcohol-resistant foam, CO₂, powders, water spray.

For safety reasons unsuitable extinguishing agents

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates

5.3 Advice for firefighters

Protective equipment:

Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Appropriate breathing apparatus may be required.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.

Refer to protective measures listed in sections 7 and 8. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

6.2 Environmental precautions:

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations

6.3 Methods and material for containment and cleaning up:

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant.

One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13)

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Protective Measures & Advice on General Occupational hygiene

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Care should be taken when re-opening partly-used containers. Precautions should be taken to minimise exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurisation.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection.

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage , including incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool, and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage

7.3 Specific end use(s)

Not Available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Product/ingredient name	Exposure limit values
xylene (mixture of isomers)	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
quartz, respirable fraction	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 0.1 mg/m ³ 8 hours. Form: respirable dust
antimony trioxide	EH40/2005 WELs (United Kingdom (UK), 12/2011). Notes: as Sb TWA: 0.5 mg/m ³ , (as Sb), 0 times per shift, 8 hours.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the Assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
2-methoxy-1-methylethyl acetate	DNEL	Long Term Inhalation	275 mg/m ³ 50ppm	Workers	Systemic
	DNEL	Long Term Dermal	153.5 mg/m ³	Workers	Systemic
	DNEL	Long Term Dermal	54.8 mg mg/m ³	Consumers	Systemic
	DNEL	Long Term Oral	1.67 mg/m ³	Consumers	Systemic
xylene (mixture of isomers)	DNEL	Long Term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Short Term	289 mg/m ³	Workers	Systemic

	DNEL	Inhalation Short Term	289 mg/m ³	Workers	Local
	DNEL	Inhalation Long Term	180 mg/kg	Workers	Systemic
	DNEL	Dermal	bw/day		
	DNEL	Inhalation Long Term	14.8 mg/m ³	Consumers	Systemic
	DNEL	Inhalation Short Term	174 mg/m ³	Consumers	Systemic
	DNEL	Inhalation Short Term	174 mg/m ³	Consumers	Local
	DNEL	Inhalation Long Term	108 mg/kg	Consumers	Systemic
	DNEL	Dermal	bw/day		
	DNEL	Inhalation Long Term	1.6 mg/kg	Consumers	Systemic
		Oral	bw/day		

PNECs

Product/ingredient name	Compartment Detail	Value	Method detail
2-methoxy-1-methylethyl acetate	Fresh Water	0.635 mg/l	-
	Fresh Water Sediment	3.29 mg/kg	-
	Marine Water Sediment	0.329 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewerage Treatment Plant	100 mg/l	-
xylene (mixture of isomers)	Fresh Water	0.327 mg/l	Assessment factors
	Marine Water	0.327 mg/l	Assessment factors
	Intermittent Releases	0.327 mg/l	Assessment factors
	Sewerage Treatment Plant	6.58 mg/l	Assessment factors
	Fresh Water Sediment	12.46 mg/kg dwt	Assessment factors
	Marine Water Sediment	12.46 mg/kg dwt	Assessment factors
	Soil	2.31 mg/kg dwt	Assessment factors

8.2 Exposure controls

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

General protective and hygienic 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location

Breathing equipment:

By spraying: air-fed respirator.

By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

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. Recommended: organic vapour Type A) and particulate filter (EN 141)

Protection of hands:

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Material of gloves

For prolonged or repeated handling, use the following type of gloves:

Recommended : > 8 hours (breakthrough time): fluor rubber / Butyl rubber gloves.

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003

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.

Eye protection:

Safety glasses with side shields. (EN166)

Body Protection

Personnel should wear antistatic clothing made of natural fibres or of high temperature-resistant synthetic fibres. (EN 1149-1)

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information:

Appearance:

Form:	Liquid
Colour:	Grey
Odour:	Not Available
Odour threshold:	Not Available
pH-value:	Not Applicable
Change in condition	
Melting point/Melting range:	Not Available
Initial Boiling point/Boiling range:	Not Available
Flash point:	42°C

Evaporation Rate:	Not Available
Flammability (solid, gaseous)	Not Available
Critical values for explosion:	
Lower:	Not Available
Upper:	Not Available
Vapour pressure at 20°C:	Not Available
Vapour density:	Not Available
Relative Density:	1.41 – 1.43 g/cm ³ (20°C)
Solubility in / Miscibility with Water:	Not Available
Partition coefficient (n-octanol/water):	Not Available
Auto Ignition temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	Dynamic (room temperature): 3500 mPa·s
Explosive Properties:	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat
Oxidising Properties:	Not Available

9.2 Other information No Additional Information

10. STABILITY AND REACTIVITY

10.1 Reactivity

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

10.2 Chemical stability

Conditions to be avoided:

Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

The product reacts slowly with water, resulting in the production of carbon dioxide.

In closed containers, pressure build-up could result in distortion, expansion and, in extreme cases, bursting of the container

10.4 Conditions to avoid

In a fire, hazardous decomposition products may be produced

10.5 Incompatible materials:

Keep away from: oxidising agents, strong alkalis, strong acids, amines, alcohols, water.

Uncontrolled exothermic reactions occur with amines and alcohols.

10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated..

11. TOXICOLOGICAL DATA

11.1 Information on toxicological effects

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into

account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains aromatic polyisocyanate prepolymer n.o.s., 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers, reaction product of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecanamide) 12-hydroxy-N-[2-[(1-oxyhexyl) amino]ethyl]octadecanamide and N,N'-ethane-1,2-diylbis(hexanamide), bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

Acute Toxicity

Product/ingredient Name	Result	Species	Dose	Exposure
xylene (mixture of isomers)	LC50 Inhalation Gas	Rat	5000 ppm	4 hours
	LC50 Inhalation Gas	Rat	6670 ppm	4 hours
	LD50 Oral	Rat	4300 mg/Kg	
	TDLo Dermal	Rabbit	4300 mg/Kg	
2-methoxy-1-methylethyl Acetate	LC50 Inhalation Vapour	Rat	4345 mg/l	6 hours
	LD50 Dermal	Rabbit	<5g/Kg	
	LD50 Oral	Rat	8532 mg/Kg	
aromatic polyisocyanate prepolymer n.o.s.	LD50 Oral	Rat	>5000 mg/Kg	
hydrocarbons, aromatic, C9	LD50 Oral	Mouse	8400 mg/Kg	
	LD50 Oral	Rat	8400 mg/kg	
antimony trioxide	LC50 Inhalation Dusts and Mists	Rat	>5200 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>8300 mg/kg	
	LD50 Oral	Rat	>34.6 g/Kg	
isophoronediiisocyanate homopolymer	LD50 Oral	Rat	5.01 mg/l	4 hours
	LC50 Inhalation Dusts and Mists	Rat	>5000 mg/Kg	
pentamethyl-4-piperidyl sebacate	LD50 Dermal	Rat	>2000 mg/Kg	
	LD50 Oral	Rat	>2000 mg/Kg	
tri-(2-methoxyethoxy) vinylsilane	LD50 Oral	Rat	2960 mg /Kg	

Conclusion/Summary: Based on available data, the classification criteria are not met.

Acute toxicity estimates: Not available

Irritation/Corrosion

Product/ingredient Name	Result	Species	Score	Exposure	Observation
isophoronediiisocyanate, homopolymer	Skin - Oedema Eyes - Cornea opacity	Rabbit Rabbit	0 1	- -	
2-ethylhexyl (3-isocyanatomethylphenyl) carbamate	Eyes - Severe irritant	Rabbit	-	24 hours 100 ul	
hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit	-	24 hours 100 ul	
xylene (mixture of isomers)	Eyes - Mild Irritant Eyes - Severe Irritant Skin - Mild Irritant Skin - Moderate Irritant Skin - Moderate Irritant	Rabbit Rabbit Rat Rabbit Rabbit	- - - - -	87 mg 24 hours 5 mg 8 hours 60 ug 24 hours 50 mg 100 %	
antimony trioxide	Eyes - Mild irritant	Rabbit	-	100 mg	
pentamethyl-4-piperidyl sebacate	Skin - Oedema	Rabbit	0	-	
tri-(2-methoxyethoxy) vinylsilane	Skin - Mild Irritant	Rabbit	-	500 mg	

Respiratory: Based on available data, the classification criteria are not met.

Conclusion/Summary

Skin: Causes skin irritation

Eyes: Causes serious eye irritation

Respiratory: May cause damage to organs through prolonged or repeated exposure if inhaled.

Sensitisation

Product/ingredient name	Route of Exposure	Species	Result
isophoronediiisocyanate, homopolymer	Skin	Rabbit	Sensitising
pentamethyl-4-piperidyl sebacate	Skin	Guinea Pig	Sensitising

Conclusion/Summary

Skin: May cause an allergic skin reaction

Respiratory: Based on available data, the classification criteria are not met.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
hydrocarbons, aromatic,	OECD 471	Subject: Bacteria	Negative

C9			
isophoronediiisocyanate, homopolymer	OECD 471 OECD 473	Experiment: In vitro Subject: Bacteria Experiment: In vitro Subject: Mammalian-Animal	Negative Negative
pentamethyl-4-piperidyl sebacate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/ingredient name	Maternal Toxicity	Fertility	Developmental Toxin	Species	Dose	Exposure
hydrocarbons, aromatic, C9	-	-	Negative	Mammal - species unspecified	Unreported	-

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of Exposure	Target Organs
hydrocarbons, aromatic, C9	Category 3	Not Applicable	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of Exposure	Target Organs
Quartz, respirable fraction	Category 1	Inhalation	Respiratory tract

Aspiration Hazard

Product/ingredient name	Result
hydrocarbons, aromatic, C9	ASPIRATION HAZARD - Category 1

12. ECOLOGICAL DATA

12.1 Toxicity

There is no data available on the mixture itself
Do not allow to enter drains or watercourses

Product/ingredient Name	Result	Species	Exposure
2-methoxy-1-methylethyl	Acute EC50 408 to 500 mg/l	Daphnia spec	48 hours

acetate)	Acute LC50 161 mg/l Acute LC50 100 to 180 mg/l	Fish Fish	96 hours 96 hours
aromatic polyisocyanate prepolymer n.o.s.	Acute EC50 >10000 mg/l	Bacteria	10 minutes
3-butyl-2-(1-ethylpentyl)-oxazolidine	Acute EC50 1.1 mg/l Acute IC50 5.6 mg/l Acute LC50 20 mg/l	Daphnia spec Algae Fish	48 hours 72 hours 96 hours
antimony trioxide	Acute EC50 730 µg/l Fresh water Acute EC50 423450 µg/l Fresh water Acute LC50 4,15 ppm Marine water Acute LC50 >530 mg/l Fresh water Acute LC50 80000 µg/l Fresh water Chronic NOEC 200 µg/l Fresh water	Algae - Pseudokirchneriella Subcapitata Daphnia spec. - Daphnia magna Crustaceans - Americamysis Bahía Fish - Lepomis macrochirus - Young of the year Fish - Pimephales promelas Algae - Pseudokirchneriella subcapitata	72 hours 48 hours 48 hours 96 hours 96 hours 96 hours
pentamethyl-4-piperidyl sebacate	Acute EC50 1,68 mg/l Acute EC50 >100 mg/l Acute EC50 20 mg/l Acute LC50 0,97 mg/l Acute LC50 7,9 mg/l Chronic NOEC 1 mg/l	Aquatic plants - Desmodemus Subspicatus Bacteria Daphnia spec. Fish Fish Daphnia spec	72 hours 3 hours 24 hours 24 hours 96 hours 21 days

Conclusion/Summary: Harmful to aquatic life with long lasting effects

12.2 Persistence and degradability

Product/ingredient Name	Test	Result	Dose	Inoculum
xylene (mixture of isomers)		90% - Readily - 5 Days	-	
pentamethyl-4-piperidyl sebacate	OECD 301F	38% - Not Readily- 28 days		

Conclusion/Summary: This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Product/ingredient Name	Aquatic half-life	Photolysis	Biodegradability
xylene (mixture of isomers)	-	-	Readily
2-methoxy-1-methylethyl Acetate	-	-	Readily
hydrocarbons, aromatic, C9	-	-	Readily
pentamethyl-4-piperidyl sebacate			Not Readily

12.3 Bioaccumulative potential

Product/ingredient Name	LogP _{ow}	BCF	Potential
xylene (mixture of isomers)	3.16	-	Low
2-methoxy-1-methylethyl acetate	0.43	-	Low
hydrocarbons, aromatic, C9	3.7-4.5	-	High
2-ethylhexyl (3-isocyanatomethylphenyl)-Carbamate	5.6	-	High
pentamethyl-4-piperidyl sebacate	2.4-2.8	-	Low

12.4 Mobility in soil Volatile

12.5 Results of PBT and VPvB assessment Not Applicable

12.6 Other adverse effects; No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

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.

Hazardous Waste:

Yes

Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.




If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

European Waste catalogue (EWC)

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

14. TRANSPORT INFORMATION

	ADR/RID (Note 14.8)	IMDG (Note 14.9)	IATA
14.1 UN Number	UN 1263	UN 1263	UN 1263
14.2 Proper Shipping Name	Paint Related Product	Paint Related Product	Paint Related Product
14.3 Transport Class(es)	3 Flammable liquids. 	3 Flammable liquids. 	3 Flammable liquids. 
14.4 Packing Group	III	III	III
14.5 Environmental	-	-	-

Hazards			
14.6 Tunnel restriction Code	D/E	D/E	D/E

Marine pollutant: No

14.7 Special precautions for user Warning: Flammable liquids.
Kemler Number: 30

14.8 Due to its relatively high viscosity this material can be considered non-hazardous in accordance to ADR 2.2.3.1.5 when packed in receptacles of less than 450 litres.

14.9 Due to its relatively high viscosity, and in accordance with section 2.3.2.5 of the IMDG code, this material is not subject to the provisions for marking, labelling and testing of packages, when packed in receptacles of no greater than 30 litres.

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

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

CN Code: 3208 90 91

EU regulation (EC) 1907/2006 (REACH)
Annex XIV - List of substances subject to authorization
Annex XIV

None of the components are listed

Substances of very high concern

None of the components are listed

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable

Other EU Regulations

VOC for Ready-for-use mixture

2004/42/EC - IIA/i: 600g/l (2007) 500g/l (2010). ≤ 275g/l VOC.

Europe inventory :

All components are listed or exempted.

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
antimony trioxide	Carc. 2, H351	-	-	-
tri-(2-methoxyethoxy) vinylsilane		-	-	Repr. 2, H361f

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

16 OTHER INFORMATION

Indicates information that has changed from previously issued version.
Xylene DNEL's and PNEC's included

Abbreviations and acronyms

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to regulation (EC) 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	Expert judgment
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2, H319	Expert judgment
Skin Sens. 1, H317	Expert judgment
STOT RE 2, H373	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

Full text of abbreviated H Statements Full text of classifications [CLP/GHS]

H226 Flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.
 H361f Suspected of damaging fertility.
 H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Full text of Classifications [CLP/GHS]

Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4
 Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4

Aquatic Acute 1, H400	AQUATIC TOXICITY (ACUTE) - Category 1
Aquatic Chronic 1, H410	AQUATIC TOXICITY (CHRONIC) - Category 1
Aquatic Chronic 2, H411	AQUATIC TOXICITY (CHRONIC) - Category 2
Aquatic Chronic 3, H412	AQUATIC TOXICITY (CHRONIC) - Category 3
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Carc. 2, H351	CARCINOGENICITY - Category 2
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Repr. 2, H361f	TOXIC TO REPRODUCTION [Fertility] - Category 2
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
STOT RE 1, H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION [respiratory tract] - Category 1
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION - Category 2
STOT SE 3, H335 and H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects] - Category 3

Note

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality.

The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

Date of Issue; 3rd August 2015

Version; 2

Replaces; version 1 (issued 01/04/15)