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

1.1 Product identifier

Trade name : PRIMAIRE (PRIMER) PU AQUEUX
Index No : NA
CE No. : NA
CAS No. : NA
REACH Registration No. : The product is a mixture, no need to be REACH registered.
Product description : mixture
Origin: organic, isocyanates – MDI (methyl diisocyanate)

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

Use of the Substance/Mixture : Primer. Component of a polyurethane system.

1.3 Details of the supplier of the safety data sheet

Company : KEMICA COATINGS
Adress : Z.A. DU BOIS GUESLIN
28630 MIGNIERES
FRANCE
Telephone : +33 (0)2 37 26 39 87
+33 (0)2 37 26 33 56

E-mail address of person responsible for the SDS : info@kemica-coatings.com

1.4 Emergency telephone number

National Advisory Body / Poison Center

France : ORFILA
Telephone : +33 (0)1 45 42 59 59

Supplier
Telephone : +33 2 37 26 33 56

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product description – substance type – Composition : mixture

Classification (REGULATION (EC) No 1272/2008)

Acute Tox. 4	H332: Harmful if inhaled.
Skin Corr. 2	H315: Causes skin irritation.
Eye Dam. 2	H319: Causes serious eye irritation.
Resp. Sens. 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin. Sens. 1	H317: May cause an allergic skin reaction.
Carc. 2	H351: Suspected of causing cancer.
STOT SE 3	H335: May cause respiratory irritation.
STOT RE 2	H373: May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word	:	Danger	
Hazard statements	:	H315	Causes skin irritation.
		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation.
		H332	Harmful if inhaled.
		H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
		H335	May cause respiratory irritation.
		H351	Suspected of causing cancer.
		H373	May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	:	**Prevention:**	
		P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		P285	In case of inadequate ventilation wear respiratory protection.
		Response:	
		P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
		Disposal:	
		P501	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous components which must be listed on the label:

Isocyanate prepolymer

Isocyanic acid, polymethylenepolyphenylene ester

methylenediphenyl diisocyanate

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl)

Isocyanic acid, polymethylenepolyphenylene ester, polymer with alpha-methyl-omega-hydroxypoly (oxy-1,2-ethanediyl) and alpha-hydro-omega-hydroxypoly[oxy(methyl-1,2-ethanediyl)]

Additional Labelling:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components :

Chemical name	CAS No. CE No. Index No. Registration No.	Classification	Concentration (% w/w)
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy(methyl-1,2-ethanediyl)]	53862-89-8 Polymer	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	>= 30 - < 50
Propylene carbonate	108-32-7 203-572-1 607-194-00-1 01-2119537232-48	Eye Irrit. 2; H319	>= 10 - < 20
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9 Polymer	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	>= 10 - < 20
Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate	Not Assigned - 01-2119457015-45	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	>= 10 - < 20
Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)	70644-56-3 Polymer	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	>= 1 - < 10
Isocyanic acid, polymethylenepolyphenylene ester, polymer with, .alpha.-methyl-.omega.-hydroxypoly (oxy-1,2-ethanediyl) and, .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]	Not Assigned Polymer	Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Resp. Sens. 1; H334 Carc. 2; H351	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

Move out of dangerous area. Do not leave the victim unattended. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

4.1.1. If inhaled :

If breathed in, move person into fresh air. Call a physician or poison control centre immediately. Keep patient warm and at rest. Keep respiratory tract clear. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice. Consult a physician immediately if symptoms such as shortness of breath or asthma are observed. A hyper-reactive response to even minimal concentrations of diisocyanates may develop in sensitised persons. The exposed person may need to be kept under medical surveillance for 48 hours. LC50 (rat) : ca. 490 mg/m³ (4 hours) : using experimentally produced respirable aerosol having aerodynamic diameter <5microns.

4.1.2. In case of skin contact :

In case of contact, immediately flush skin with soap and plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse. Call a physician if irritation develops or persists. An MDI study has demonstrated that a polyglycol-based skin cleanser (such as D-TamTM, PEG-400) or corn oil may be more effective than soap and water.

4.1.3. In case of eye contact :

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If easy to do, remove contact lens, if worn. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

4.1.4. If swallowed :

Gently wipe or rinse the inside of the mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Keep respiratory tract clear. Keep at rest. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Take victim immediately to hospital. If symptoms persist, call a physician.

4.2. Most important symptoms and effects, both acute and delayed :

Symptoms : Severe allergic skin reactions, bronchiospasm and anaphylactic choc
Risks : This product is a respiratory irritant and potential respiratory sensitiser: repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation. Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons.

4.3. Indication of any immediate medical attention and special treatment needed :

Treatment : Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Foam, Carbon dioxide (CO2), Dry powder
Unsuitable extinguishing media : Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.

5.2. Special hazards arising from the substance or mixture :

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses. The pressure in sealed containers can increase under the influence of heat.

Exposure to to decomposition products may be a hazard to health.

Hazardous combustion products	: Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN. In the event of extreme heat

5.3 Advice for firefighters

Special protective equipment for firefighters :	Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Specific extinguishing methods :	Cool containers/tanks with water spray.
Further information :	Standard procedure for chemical fires. Due to reaction with water producing CO2-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system.Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Immediately evacuate personnel to safe areas. Use personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Only qualified personnel equipped with suitable protective equipment may intervene. For additional precautions and advice on safe handling, see section 7. Never return spills in original containers for re-use. Make sure that there is a sufficient amount of neutralizing/ absorbent material near the storage area. The danger areas must be delimited and identified using relevant warning and safety signs. Treat recovered material as described in the section "Disposal considerations". For disposal considerations see section 13.

6.2 Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Do not allow material to contaminate ground water system. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Clean-up methods - small spillage

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. Sweep up or vacuum up spillage and collect in suitable container for disposal. Neutralize small spillages with decontaminant. The compositions of liquid decontaminants are given in Section 16. Remove and dispose of residues.

Clean-up methods - large spillage

If the product is in its solid form: Spilled MDI flakes should be picked up carefully. The area should be vacuum cleaned to remove remaining dust particles completely. If the product is in its liquid form: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Leave to react for at least 30 minutes. Shovel into open-top drums for further decontamination. Wash the spillage area with water. Test atmosphere for MDI vapour. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13., The compositions of liquid decontaminants are given in Section 16.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Ensure that eyewash stations and safety showers are close to the workstation location.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : For personal protection see section 8. Avoid formation of aerosol. Do not breathe vapours or spray mist. Do not breathe vapours/dust. Do not swallow. Do not get in eyes or mouth or on skin. Do not get on skin or clothing. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Keep container closed when not in use. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Observe label precautions. Protect from moisture. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage : Acids, Amines, Bases, Metals, water

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End use	Exposure routes	Potential health effects	Value
Isocyanic acid, polymethylenepolyphenylene ester	Workers	Dermal	Systemic effects, Short-term exposure	50 mg/kg bw/day
	Workers	Inhalation	Systemic effects, Short-term exposure	0,1 mg/m3
	Workers	Dermal	Local effects, Short-term exposure	27,8 mg/kg bw/day
	Workers	Inhalation	Local effects, Short-term exposure	0,1 mg/m3
	Workers	Inhalation	Long-term - systemic effects	0,05 mg/m3
	Workers	Inhalation	Long-term – local effects	0,05 mg/m3

	Consumers	Dermal	Systemic effects, Short-term exposure	25 mg/kg bw/day
	Consumers	Inhalation	Systemic effects, Short-term exposure	0,05 mg/m3
	Consumers	Oral	Systemic effects, Short-term exposure	20 mg/kg bw/day
	Consumers	Dermal	Local effects, Short-term exposure	17,2 mg/cm2
	Consumers	Inhalation	Local effects, Short-term exposure	0,05 mg/m3
	Consumers	Inhalation	Long-term - systemic effects	0,025 mg/m3
	Consumers	Inhalation	Long-term – local effects	0,025 mg/m3
Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)	Workers	Dermal	Effets systémiques, Exposition à court terme	50 mg/kg bw/day
	Workers	Inhalation	Systemic effects, Short-term exposure	0,1 mg/m3
	Workers	Dermal	Local effects, Short-term exposure	27,8 mg/kg bw/day
	Workers	Inhalation	Local effects, Short term exposure	0,1 mg/m3
	Workers	Inhalation	Long-term, systemic effects	0,05 mg/m3
	Workers	Inhalation	Long-term, local effects	0,05 mg/m3
	Consumers	Dermal	Systemic effects, short-term exposure	25 mg/kg bw/day
	Consumers	Inhalation	Systemic effects, short-term exposure	0,05 mg/m3
	Consumers	Oral	Systemic effects, short-term exposure	20 mg/kg bw/day
	Consumers	Dermal	Local effects, short-term exposure	17,2 mg/cm2

	Consumers	Inhalation	Local effects, short-term exposure	0,05 mg/m3
	Consumers	Inhalation	Long-term – systemic effects	0,025 mg/m3
	Consumers	Inhalation	Long-term – systemic effects	0,025 mg/m3
Propylene carbonate	Travailleurs	Inhalation	Long-term – systemic effects	70,53 mg/m3
	Travailleurs	Inhalation	Long-term – local effects	20 mg/m3
	Travailleurs	Dermal	Long-term – systemic effects	10 mg/kg bw/day
	Consommateurs	Inhalation	Long-term - systemic effects	17,4 mg/m3
	Consommateurs	Inhalation	Long-term – local effects	10 mg/m3
	Consommateurs	Dermal	Long-term – systemic effects	10 mg/kg bw/day
	Consommateurs	Oral	Long-term – systemic effects	10 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Nom de la substance	Compartiment de l'Environnement	Valeur
Isocyanic acid, Polymethylenepolyphenylene ester	Fresh water	1 mg/l
Remarks:	Assessment Factors	
	Marine water	0,1 mg/l
	Assessment Factors	
	Soil	1 mg/kg
	Assessment Factors	
	Sewage treatment plant	1 mg/l
	Assessment Factors	
	Freshwater - intermittent	10 mg/l
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)	Fresh water	1 mg/l
	Assessment Factors	
	Marine water	0,1 mg/l
	Assessment Factors	
	Soil	1 mg/kg
	Assessment Factors	
	Sewage treatment plant	1 mg/l
	Assessment Factors	
	Freshwater - intermittent	10 mg/l

Propylene carbonate	Fresh water	0,9 mg/l
	Freshwater - intermittent	9 mg/l
	Marine water	0,09 mg/l
	Sewage treatment plant	7400 mg/l
	Soil	0,81 mg/kg

8.2 Exposure controls

Eye protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Chemical splash goggles. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded. Please follow all applicable local/national requirements when selecting protective measures for a specific workplace. Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection
Remarks : Protective gloves should be worn when handling freshly made polyurethane products to avoid contact with trace residual materials which may be hazardous in contact with skin.
Use chemical resistant gloves classified under Standard EN374: protective gloves against chemicals and microorganisms. Examples of glove materials that might provide suitable protection include: Butyl rubber, Chlorinated polyethylene, Polyethylene, Ethyl vinyl alcohol copolymers laminated (“EVAL”), Polychloroprene (Neoprene*), Nitrile/butadiene rubber (“nitrile” or “NBR”), Polyvinyl chloride (“PVC” or “vinyl”), Fluoroelastomer (Viton*). When prolonged or frequently repeated contact may occur, a glove with protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN374) is recommended. When only brief contact is expected, a glove with protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN374) is recommended. Contaminated gloves should be decontaminated and disposed of. Notice: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all requisite workplace factors such as, but not limited to : other chemicals that may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), as well as instructions/specifications provided by the glove supplier.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin and body protection
Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Recommended:
Overall (preferably heavy cotton) or Tyvek-Pro Tech 'C' , Tyvek Pro 'F' disposable coverall.

Respiratory 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.
In emergency, non-routine and unknown exposure situations, including confined space entries, a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA)or a full facepiece pressure demand supplied air respirator (SAR) with auxiliary self-contained air supply, should be used.

Protective measures
Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Ensure that eye flushing systems and safety showers are located close to the working place.

RUBRIQUE 9: Propriétés physiques et chimiques

9.1 Informations sur les propriétés physiques et chimiques essentielles

Appearance	:	liquid
Colour	:	light brown
Odour	:	No data is available on the product itself.
Odour threshold	:	No data is available on the product itself.
pH	:	No data is available on the product itself.
Freezing point	:	No data is available on the product itself.
Melting point	:	No data is available on the product itself.
Boiling point	:	No data is available on the product itself.
Flash point	:	200 °C Method: closed cup
Evaporation rate	:	No data is available on the product itself.
Flammability (solid, gas)	:	No data is available on the product itself.
Burning rate	:	No data is available on the product itself.
Upper explosion limit / Upper flammability limit	:	No data is available on the product itself.
Lower explosion limit / Lower flammability limit	:	No data is available on the product itself.
Vapour pressure	:	No data is available on the product itself.
Relative vapour density	:	No data is available on the product itself.
Relative density	:	No data is available on the product itself.
Density	:	No data is available on the product itself.
Solubility(ies)		
Water solubility	:	No data is available on the product itself.
Solubility in other solvents	:	No data is available on the product itself.
Partition coefficient: n-octanol/water	:	No data is available on the product itself.
Auto-ignition temperature	:	No data is available on the product itself.
Decomposition temperature	:	No data is available on the product itself.
Viscosity		
Viscosity, dynamic	:	400 mPa,s (25 °C)
Explosive properties	:	No data is available on the product itself.
Oxidizing properties	:	No data is available on the product itself.

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reaction with water (moisture) produces CO2-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

10.4 Conditions to avoid

Conditions to avoid :
Extremes of temperature and direct sunlight.
Exposure to air or moisture over prolonged periods.

10.5 Incompatible materials
Materials to avoid : Acids, Amines, Bases, Metals, water

10.6 Hazardous decomposition products
Combustion products may include : carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN. In the event of extreme heat (>500 degrees C), aniline is suspected of being formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Components:

Isocyanate prepolymer**:**
Acute oral toxicity : LD50 (Rat, male): > 10 000 mg/kg
Method: OECD Test Guideline 401

Propylene carbonate**:**
Acute oral toxicity : LD50 (Rat, male et female): 33 520 mg/kg

Isocyanic acid, polymethylenepolyphenylene ester**:**
Acute oral toxicity : LD50 (Rat, male): > 10 000 mg/kg
Method: OECD Test Guideline 401

methylenediphenyl diisocyanate**:**
Acute oral toxicity : LD50 (Rat, male et female): > 2 000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl):
Acute oral toxicity : LD50 (Rat, male): > 10 000 mg/kg
Method: OECD Test Guideline 401
Acute inhalation toxicity- Product : Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute toxicity estimate : 1,75 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Composants:

Isocyanate prepolymer**:**
Acute dermal toxicity : LD50 (Rabbit, male and female): > 9 400 mg/kg
Method: OECD Test Guideline 402

Propylene carbonate**:**
Acute dermal toxicity : LD50 (Rabbit, male and female): > 3 000 mg/kg
Method: OECD Test Guideline 402
LD50 (Rabbit, male and female): > 2 000 mg/kg
Method: OECD Test Guideline 402

Isocyanic acid, polymethylenepolyphenylene ester**:**
Acute dermal toxicity : LD50 (Rabbit, male and female): > 9 400 mg/kg
Method: OECD Test Guideline 402

methylenediphenyl diisocyanate**:**
Acute dermal toxicity : LD50 (Rabbit, male and female): > 9 400 mg/kg
Method: OECD Test Guideline 402

Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**
Acute dermal toxicity : LD50 (Rabbit, male and female): > 9 400 mg/kg
Method: OECD Test Guideline 402

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

Isocyanic acid, polymethylenepolyphenylene ester**:**
Assessment: May cause an allergic skin reaction., May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Components:

Isocyanate prepolymer**:**	:	Concentration: 200 ug/plate
Genotoxicity in vitro		Metabolic activation: with and without metabolic activation
		Method: Directive
propylene carbonate**:**	:	Concentration: 5000 ug/plate
Genotoxicity in vitro		Metabolic activation: with and without metabolic activation
		Method: OECD Test Guideline 471
		Result: negative
	:	Metabolic activation: negative
		Method: OECD Test Guideline 482
		Result: negative

Isocyanic acid, polymethylenepolyphenylene ester**:**

Genotoxicity in vitro	:	Concentration: 200 ug/plate
		Metabolic activation: with and without metabolic activation
		Method: Directive 67/548/EEC, Annex, B.13/14
		Result: negative

methylenediphenyl diisocyanate:

Genotoxicity in vitro	:	Concentration: 200 ug/plate
		Metabolic activation: with and without metabolic activation
		Method: Directive 67/548/EEC, Annex, B.13/14
		Result: negative

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl):

Genotoxicity in vitro	:	Concentration: 200 ug/plate
		Metabolic activation: with and without metabolic activation
		Method: Directive 67/548/EEC, Annex, B.13/14
		Result: negative

Components:

Isocyanate prepolymer**:**	:	Application Route: Inhalation
Genotoxicity in vivo		Exposure time: 3 Weeks
		Dose: 118 mg/m3
		Method: OECD Test Guideline 474
		Result: negative
propylene carbonate:	:	Application Route: Intraperitoneal injection
Genotoxicity in vivo		Dose: 1666 mg/kg
		Method: OECD Test Guideline 474

Result: negative

Isocyanic acid, polymethylenepolyphenylene ester:

Genotoxicity in vivo : Application Route: Inhalation
Result: Not classified due to inconclusive data.
Application Route: Inhalation
Exposure time: 3 Weeks
Dose: 113 mg/m3
Method: OECD Test Guideline 474
Result: negative

methylenediphenyl diisocyanate:

Genotoxicity in vivo : Application Route: Inhalation
Exposure time: 3 Weeks
Dose: 118 mg/m3
Method: OECD Test Guideline 474
Result: negative

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl):

Genotoxicity in vivo : Application Route: Inhalation
Result: Not classified due to inconclusive data.
Application Route: Inhalation
Exposure time: 3 Weeks
Dose: 113 mg/m3
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity
Product: Remarks: Rats have been exposed for two years to a respirable aerosol of polymeric MDI which resulted in a chronic pulmonary irritation at high concentrations. Only at the top level (6 mg/m3), there was a significant incidence of a benign tumour of the lung (adenoma) and one malignant tumour (adenocarcinoma). There were no lung tumours at 1 mg/m3 and no effects at 0.2 mg/m3. Overall, the tumour incidence, both benign and malignant, and the number of animals with the tumours were not different from controls. The increased incidence of lung tumours is associated with prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung, which occurred throughout the study. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumour formation will occur.

Components:

Isocyanate prepolymer**:**
Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Isocyanic acid, polymethylenepolyphenylene ester:
Carcinogenicity - Assessment : Suspected human carcinogens

methylenediphenyl diisocyanate:
Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl):
Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Components:

propylene carbonate:

Effects on fertility : Species: Rat
Application Route: Oral
Method: OECD Test Guideline 414
Result: negative

Isocyanic acid, polymethylenepolyphenylene ester:

Species: Rat, male and female
Application Route: Inhalation
Method: OECD Test Guideline 414
Remarks: No significant adverse effects were reported

methylenediphenyl diisocyanate:

Species: Rat, male and female
Application Route: Inhalation
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic development were detected.

Components:

Isocyanate prepolymer**:**

Effects on foetal development : Species: Rat, male and female
Application Route: Inhalation
Method: OECD Test Guideline 414
Result: No teratogenic effects

propylene carbonate **:** Species: Rat, male and female
Application Route: Oral
General Toxicity Maternal: No observed adverse effect level: 1 000 mg/kg body weight
Method: OECD Test Guideline 414

Result: No teratogenic effects

Isocyanic acid, polymethylenepolyphenylene ester**:**

Species: Rat, male and female
Application Route: Inhalation
General Toxicity Maternal: 4 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects

methylenediphenyl diisocyanate**:**

Species: Rat, female
Application Route: Inhalation
General Toxicity Maternal: No observed adverse effect level: 4 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects.

Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**

Species: Rat, male and female
Application Route: Inhalation
General Toxicity Maternal: No observed adverse effect level: 4 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects

Reproductive toxicity - Assessment: No data available

STOT - single exposure

Components:

Isocyanate prepolymer**:**
Exposure routes: inhalation (dust/mist/fume)
Target Organs: Respiratory system
Assessment: May cause respiratory irritation.

Isocyanic acid, polymethylenepolyphenylene ester:
Exposure routes: Inhalation
Target Organs: Respiratory Tract
Assessment: May cause respiratory irritation.

methylenediphenyl diisocyanate:
Exposure routes: Inhalation
Target Organs: Respiratory Tract
Assessment: May cause respiratory irritation.

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl):
Exposure routes: inhalation (dust/mist/fume)
Target Organs: Respiratory system
Assessment: May cause respiratory irritation.

STOT - repeated exposure
Components:
Isocyanate prepolymer**:**
Exposure routes: Inhalation
Target Organs: Respiratory system
Assessment: May cause damage to organs through prolonged or repeated exposure.

Isocyanic acid, polymethylenepolyphenylene ester**:**
Assessment: May cause damage to organs through prolonged or repeated exposure.
Remarks: Information given is based on data obtained from similar substances.

methylenediphenyl diisocyanate**:**
Exposure routes: Inhalation
Target Organs: Respiratory Tract
Assessment: May cause damage to organs through prolonged or repeated exposure.

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**
Exposure routes: inhalation (dust/mist/fume)
Target Organs: Respiratory system
Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:
Isocyanate prepolymer**:**
Species: Rat, male and female
NOEC: 0,2
Exposure time: 2 yrNumber of exposures: 5 d

Method: OECD Test Guideline 453

propylene carbonate**:**
Species: Rat, male and female
NOEC: > 5000 mg/kg, 100
Application Route: Ingestion

Test atmosphere: dust/mist
Exposure time: 2 232 hNumber of exposures: 6 h
Method: OECD Test Guideline 413

Isocyanic acid, polymethylenepolyphenylene ester**:**
Species: Rat, male and female
NOEC: 0,2
Test atmosphere: dust/mist
Exposure time: 2 yrNumber of exposures: 5 d
Method: OECD Test Guideline 453

methylenediphenyl diisocyanate**:**
Species: Rat, male and female
NOEC: 0,2
Test atmosphere: dust/mist
Exposure time: 2 yrNumber of exposures: 5 d
Method: OECD Test Guideline 453

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**
Species: Rat, male and female
NOEC: 0,2
Test atmosphere: dust/mist
Exposure time: 2 yrNumber of exposures: 5 d
Method: OECD Test Guideline 453

Species: Rat, male and female
LOEC: 1,1
Test atmosphere: dust/mist
Exposure time: 336 hNumber of exposures: 6 h
Method: OECD Test Guideline 412
Repeated dose toxicity – Assessment : No data available

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available
Inhalation: No data available
Skin contact: No data available
Eye contact: No data available
Ingestion: No data available

Toxicologie, Métabolisme, Distribution

Donnée non disponible

Neurological effects

No data available

Information supplémentaire

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Isocyanate prepolymer**:**

Toxicity to fish	: LC50 (Brachydanio rerio (zebrafish)): > 1 000 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 000 mg/l Exposure time: 24 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 202
Toxicity to microorganisms	: EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Test Type: static test Test substance: Fresh water
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: >= 10 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test Test substance: Fresh water Method: OECD Test Guideline 211
Toxicity to soil dwelling organisms	: NOEC: >= 1 000 mg/kg Exposure time: 336 h Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

propylene carbonate**:**

Toxicity to fish	: LC50 (Cyprinus carpio (Carp)): > 1 000 mg/l Exposure time: 96 h Test Type: semi-static test Test substance: Fresh water Method: Directive 67/548/EEC, Annex V, C.1. Remarks: No-observed-effect level
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 000 mg/l Exposure time: 48 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 202 Remarks: No-observed-effect level
Toxicity to algae	: ErC50 (Selenastrum capricornutum (green algae)): > 929 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201 ErC50 (Desmodesmus subspicatus (green algae)): > 900 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201
Toxicity to microorganisms	: EC50 (Pseudomonas putida): 25 619 mg/l

Exposure time: 16 h
Test Type: static test
Test substance: Fresh water
Method: DIN 38 412 Part 8

Isocyanic acid, polymethylenepolyphenylene ester**:**

Toxicity to fish	: LC50 (Brachydanio rerio (zebrafish)): > 1 000 mg/l Exposure time: 96 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 203 LC0 : > 1 000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 000 mg/l Exposure time: 24 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): > 1 640 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201
Toxicity to microorganisms	: EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 209
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: >= 10 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test Test substance: Fresh water Method: OECD Test Guideline 211
Toxicity to soil dwelling organisms	: CE50: > 1 000 mg/kg Exposure time: 336 h Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

methylenediphenyl diisocyanate**:**

Toxicity to fish	: LC50 (Brachydanio rerio (zebrafish)): > 1 000 mg/l Exposure time: 96 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 000 mg/l Exposure time: 24 h Test Type: static test

Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 1 640 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: >= 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 211

Toxicity to soil dwelling organisms : EC50: > 1 000 mg/kg
Exposure time: 336 h
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207

Isocyanic acid, polymethylenepoly phenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 1 000 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 000 mg/l
Exposure time: 24 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 1 640 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity) : NOEC: > 10000 mg/kg
Exposure time: 112 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: static test

Test substance: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: >= 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 211

NOEC: > 10 000 mg/l
Exposure time: 112 d
Species: Daphnia magna (Water flea)
Test Type: static test
Test substance: Fresh water

Toxicity to soil dwelling organisms : EC50: > 1 000 mg/kg
Exposure time: 336 h
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207

12.2 Persistence and degradability

Components:

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy(methyl-1,2-ethanediyl)]**:**

Biodegradability : Inoculum: Domestic sewage
Concentration: 30 mg/l
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

Stability in water : Degradation half life (DT50): 6 d
Method: No information available.
Remarks: Fresh water

propylene carbonate**:**

Biodegradability : Concentration: 20 mg/l
Result: Readily biodegradable.
Biodegradation: 83,5 %
Exposure time: 29 d
Method: OECD Test Guideline 301B

Isocyanic acid, polymethylenepolyphenylene ester**:**

Biodegradability : Inoculum: Domestic sewage
Concentration: 30 mg/l
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

Stability in water : Degradation half life (DT50): 0,8 d (25 °C)
Method: No information available.
Remarks: Fresh water

methylenediphenyl diisocyanate**:**

Biodegradability : Inoculum: Domestic sewage

Concentration: 30 mg/l
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-methyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl)**:**

Biodegradability : Inoculum: Domestic sewage
Concentration: 30 mg/l
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

Stability in water : Degradation half life (DT50): 0,8 d (25 °C)
Method: No information available.
Remarks: Fresh water

12.3 Bioaccumulative potential

Components:

Isocyanate prepolymer**:**
Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 200
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 4,51 (20 °C)
pH: 7
Method: OECD Test Guideline 117

propylene carbonate**:**
Partition coefficient: n-octanol/water : log Pow: -0,5 (20 °C)

Isocyanic acid, polymethylenepolyphenylene ester**:**
Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 200
Remarks: Bioaccumulation is unlikely.

methylenediphenyl diisocyanate**:**
Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 200
Remarks: Bioaccumulation is unlikely.

Bioconcentration factor (BCF): 439
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 4,51 (22 °C)
pH: 7
Method: OECD Test Guideline 117

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

IATA
Not regulated as dangerous goods
IMDG
Not regulated as dangerous goods
ADR
Not regulated as dangerous goods
RID
Not regulated as dangerous goods

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - List of substances subject to authorisation - Future sunset date : Not applicable

Occupational Illnesses (R-461-3, France) : 62

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

DSL	:	This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
ENCS	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	Not in compliance with the inventory
TSCA	:	Not On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Full text of H-Statements

H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H351	:	Suspected of causing cancer.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H373	:	May cause damage to organs through prolonged or repeated exposure if inhaled.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Carc.	:	Carcinogenicity
Eye Irrit.	:	Eye irritation
Resp. Sens.	:	Respiratory sensitisation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure

Further information

Other information	:	Liquid decontaminants (percentages by weight or volume) : Decontaminant 1 : *- sodium carbonate : 5 - 10 % *- liquid detergent : 0.2 - 2 % *- water : to make up to 100 %

Decontaminant 2 : *- concentrated ammonia solution : 3 - 8 % *- liquid detergent : 0.2 - 2 % *- water : to make up to 100 %
Decontaminant 1 reacts slower with diisocyanates but is more environmentally friendly than decontaminant 2.
Decontaminant 2 contains ammonia. Ammonia presents health hazards. (See supplier safety information.)

Liquid decontaminants (percentages by weight or volume) :
Decontaminant 1 : *- sodium carbonate : 5 - 10 % *- liquid detergent : 0.2 - 2 % *- water : to make up to 100 %
Decontaminant 2 : *- concentrated ammonia solution : 3 - 8 % *- liquid detergent : 0.2 - 2 % *- water : to make up to 100 %
Decontaminant 1 reacts slower with diisocyanates but is more environmentally friendly than decontaminant 2.
Decontaminant 2 contains ammonia. Ammonia presents health hazards. (See supplier safety information.)

Classification of the mixture:		**Classification procedure:**
Acute Tox. 4	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

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Cancels and replaces the SDS of 24/07/2015.

Advice for the reader

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THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.
Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.
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