Material Safety Data Sheet

According to 91/155 EEC

Printing date 04.04.2007 Reviewed on 21.03.2007

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1 Identification of the substance/preparation and of the company/undertaking

Product details

Trade name PLastikol 18 Komp. A

Safety data sheet no.: 49PD10420-a/6
Application of the substance / the preparation Epoxy sealing

Manufacturer/Supplier:
maxit France s.a.s
4 rue de Mulhouse
Boîte Postale 27
F-68180 Horbourg-Wihr
Tel.: ++33(0)3 89 20 10 80
FAX: ++33(0)3 89 20 10 92

Information in case of emergency:
maxit France s.a.s
Tel.: ++33(0)3 89 20 10 80

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2 Composition/information on ingredients

Chemical characterization
Description: Reaction resin based on bisphenol-A

Dangerous components:		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, N; R 36/38-43-51/53	10 - 20%
26447-14-3	1,2-epoxy-3-(tolyloxy)propane Xn, Xi, N; R 38-43-68-51/53	2 - 5%
25154-52-3	nonylphenol C, Xn, N; R 22-34-62-50/53-63	1 - 2%

Additional information For the wording of the listed risk phrases refer to section 16.

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3 Hazards identification

Hazard description:

Xn Harmful
N Dangerous for the environment

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 36/38 Irritating to eyes and skin.
R 43 May cause sensitisation by skin contact.
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 68 Possible risk of irreversible effects.
Contains epoxy constituents. See information supplied by the manufacturer.

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Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

General information
Immediately remove any clothing soiled by the product.
Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and preent this data sheet.
After inhalation Supply fresh air; consult doctor in case of complaints.
After skin contact
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
After eye contact
Rinse opened eye for several minutes under running water. Then consult doctor. Rinse liquid should be tempered (20-30°C).
After swallowing
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
Information for doctor None

5 Fire fighting measures

Suitable extinguishing agents
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents Water with full jet
Special hazards caused by the substance, its products of combustion or resulting gases:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
Protective equipment: Wear self-contained respiratory protective device.
Additional information
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Person-related safety precautions:
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.
Measures for environmental protection:
Inform respective authorities in case of seepage into water course or sewage system.
The product must not get into watercourses or into the soil.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information: See Section 13 for disposal information.

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7 Handling and storage

Handling
Information for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Keep receptacles tightly sealed.
Information about fire - and explosion protection: No special measures required.

Storage
Requirements to be met by storerooms and receptacles:
Store only in unopened original receptacles.
Store in a cool location.
Information about storage in one common storage facility:
Store away from foodstuffs.
Do not store together with alkalis (caustic solutions).
Do not store together with oxidizing and acidic materials.
Further information about storage conditions:
Protect from frost.
Protect from heat and direct sunlight.
Recommended storage temperature: 5-30°C.

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8 Exposure controls and personal protection

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:
Additional information:
Te applicable TRGS 900 (MAK list) was used as the basis for the preparation and/or revision of this safety data sheet.

Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Use a moisturising skin cream after processing the product.
Do not eat, drink, smoke or sniff while working.
Respiratory protection:
Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Short term filter device:
Filter AX.
Protection of hands:
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR

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The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information	
Form:	Fluid
Colour:	According to product specification
Odour:	Mild
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>200°C (>392°F) (DIN)
Flash point:	> 100°C (> 212°F) (DIN ISO 2592)
Ignition temperature:	>400°C (>752°F) (DIN 51794)
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	1,27 g/cm³ (DIN 51757)
Bulk density:	Not applicable.
Solubility in / Miscibility with	
Water:	Unsoluble
pH-value:	Not applicable.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent separation test:	Not determined
Solvent content:	
Organic solvents:	0,6 %
Additional information:	None.

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10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

Can decompose slowly with localised heating above 150°C

Dangerous reactions:

May produce violent reactions with bases and numerous organic substances including alcohols and amines

Reacts with strong oxidizing agents

Dangerous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

Acute toxicity:
LD/LC50 values relevant for classification:

Components	Type	Value	Species
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)			
Oral	LD50	11400 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rabbit)	
770-35-4 1-Phenoxypropan-2-ol			
Oral	LD50	4197 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rabbit)	
Inhalative	LC50/4 h	> 5400 mg/l (rat)	
26447-14-3 1,2-epoxy-3-(tolyloxy)propane			
Oral	LD50	> 2000 mg/kg (rat)	
25154-52-3 nonylphenol			
Oral	LD50	200-2000 mg/kg (rat)	
Dermal	LD50	>2000 mg/kg (rabbit)	

Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitization: Sensitization possible through skin contact.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

*

12 Ecological information:

Information about elimination (persistence and degradability):
Other information: The product is difficultly biodegradable.
Behaviour in environmental systems:

Mobility and bioaccumulation potential:	
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	
Bioakkumulation	3,5 - 4 log Pow (-)
770-35-4 1-Phenoxypropan-2-ol	
Bioakkumulation	1,61 log Pow (-)
25154-52-3 nonylphenol	
Bioakkumulation	3,28 log Pow (-)

Ecotoxical effects:
Acquatic toxicity:

Type of test	Effective concentration	Method	Assessment
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)			
EC50/24h	1,1 - 3,6 mg/l (Daphnia magna (großer Wasserfloh))		
EC50/96h	220 mg/l (Selenastrum capricornutum (Grünalge))		
LC50/96h	1,5 - 7,7 mg/l (Oncorhynchus mykiss (rainbow trout))		

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770-35-4 1-Phenoxypropan-2-ol	
LC0/96h	250 mg/l (Brachydanio rerio (Zebrabärbling))
LC50/96h	297 mg/l (Brachydanio rerio (Zebrabärbling))
25154-52-3 nonylphenol	
EC 10/18h	>16 mg/l (pseudomonas putida)
EC50/48h	< 1,0 mg/l (Daphnia magna (großer Wasserfloh))
EC50/72h	1,3 mg/l (scenedesmus subspicatus (Alge))
LC0/48h	0,4 mg/l (Leuciscus idus (Goldorfe))
LC50/48h	0,56 mg/l (Leuciscus idus (Goldorfe))
LC50/96h	< 1,0 mg/l (fish)
NOEC (14d)	0,25 mg/l (Brachydanio rerio (Zebrabärbling))
NOEC (21d)	0,1 mg/l (Daphnia magna (großer Wasserfloh))

Remark: The product contains substances which are toxic to fishes and bacteria.

General notes:
Do not allow product to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
Danger to drinking water if even small quantities leak into the ground.

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13 Disposal considerations

Product:
Recommendation
Curing of the product by mixing with the curing component. Cured epoxy resin products are waste that requires no particular supervision and can as a rule be disposed of as commercial waste that is similar to household rubbish.

European waste catalogue	
07 02 08	other still bottoms and reaction residues

Uncleaned packaging:
Recommendation:
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Disposal must be made according to official regulations.

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14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: 9 (M6) Miscellaneous dangerous substances and articles.
Danger code (Kemler): 90
UN-Number: 3082
Packaging group: III
Hazard label 9

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Description of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (nonylphenol, Epoxy Resin)

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class:	9
UN Number:	3082
Label	9
Packaging group:	III
EMS Number:	F-A,S-F
Marine pollutant:	No
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (nonylphenol, Epoxy Resin)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:	9
UN/ID Number:	3082
Label	9
Packaging group:	III
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (nonylphenol, Epoxy Resin)

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15 Regulatory information

Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:

Xn Harmful
N Dangerous for the environment

Hazard-determining components of labelling:
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
1,2-epoxy-3-(tolyloxy)propane

Risk phrases:
36/38 Irritating to eyes and skin.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
68 Possible risk of irreversible effects.

Safety phrases:
2 Keep out of the reach of children.
23 Do not breathe fumes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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28 After contact with skin, wash immediately with plenty of water.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Special labelling of certain preparations:
Contains epoxy constituents. See information supplied by the manufacturer.

*
16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases
22 Harmful if swallowed.
34 Causes burns.
36/38 Irritating to eyes and skin.
38 Irritating to skin.
43 May cause sensitisation by skin contact.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
62 Possible risk of impaired fertility.
63 Possible risk of harm to the unborn child.
68 Possible risk of irreversible effects.

Department issuing MSDS: Product safety department
Contact: Mr Gilles Weber, Tel.: ++33(0)3 89 20 10 93
*** Data compared to the previous version altered.**

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1 Identification of the substance/preparation and of the company/undertaking

Product details

Trade name Plastikol 18 Komp. B

Safety data sheet no.: 49PD10420-b/4
Application of the substance / the preparation Hardening agent/ Curing agent

Manufacturer/Supplier:
maxit France s.a.s
4 rue de Mulhouse
Boîte Postale 27
F-68180 Horbourg-Wihr
Tel.: ++33(0)3 89 20 10 80
FAX: ++33(0)3 89 20 10 92

Information in case of emergency:
maxit France s.a.s
Tel.: ++33(0)3 89 20 10 80

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2 Composition/information on ingredients

Chemical characterization
Description: Reaction resin curer based on amines and polyamines.

Dangerous components:		
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine C, Xn; R 21/22-34-43-52/53	25 - 50%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol Xn, Xi; R 22-36/38	10 - 20%
100-51-6	Benzyl alcohol Xn; R 20/22	10 - 20%
25620-58-0	Trimethylhexan-1,6-diamin C, Xn; R 22-34-43-52/53	10 - 20%
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, N; R 36/38-43-51/53	5 - 10%
26447-14-3	1,2-epoxy-3-(tolyloxy)propane Xn, Xi, N; R 38-43-68-51/53	2 - 5%

Additional information For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

Hazard description:

C Corrosive

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 21/22 Harmful in contact with skin and if swallowed.
R 34 Causes burns.
R 43 May cause sensitisation by skin contact.

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R 68 Possible risk of irreversible effects.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Contains epoxy constituents. See information supplied by the manufacturer.
Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

*
4 First aid measures

General information
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and preent this data sheet.
After inhalation Supply fresh air; consult doctor in case of complaints.
After skin contact
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.
After eye contact
Rinse opened eye for several minutes under running water. Then consult doctor. Rinse liquid should be tempered (20-30°C).
After swallowing
Rinse out mouth with water. Do not induce vomiting. Seek medical attention and present this data sheet.
Information for doctor
Treatment If swallowed, gastric irrigation with added, activated carbon.

5 Fire fighting measures

Suitable extinguishing agents
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents Water with full jet
Special hazards caused by the substance, its products of combustion or resulting gases:
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.
Additional information
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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6 Accidental release measures

Person-related safety precautions:
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

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Measures for environmental protection:
Inform respective authorities in case of seepage into water course or sewage system.
The product must not get into watercourses or into the soil.
Suppress gases/fumes/haze with water spray.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Additional information: See Section 13 for disposal information.

7 Handling and storage

Handling
Information for safe handling:
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

Storage
Requirements to be met by storerooms and receptacles:
Store only in unopened original receptacles.
Information about storage in one common storage facility:
Store away from oxidizing agents.
Store away from foodstuffs.
Further information about storage conditions:
Protect from humidity and water.
Protect from heat and direct sunlight.
Recommended storage temperature: 5-30°C.

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8 Exposure controls and personal protection

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:
Additional information:
Te applicable TRGS 900 (MAK list) was used as the basis for the preparation and/or revision of this safety data sheet.

Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Use a moisturising skin cream after processing the product.
Respiratory protection:
Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Short term filter device:

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Filter AX.
Protection of hands:
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles
Body protection: Protective work clothing.

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9 Physical and chemical properties:

General Information	
Form:	Fluid
Colour:	Colourless
Odour:	Amine-like
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 200°C (> 392°F) (DIN)
Flash point:	> 100°C (> 212°F) (DIN ISO 2592)
Ignition temperature:	ca. 400°C (ca. 752°F) (DIN 51794)
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	1,2 Vol % (DIN 51649)
Upper:	13,0 Vol % (DIN 51649)
Density at 20°C (68°F):	0,95 g/cm³ (DIN 51757)
Bulk density:	Not applicable.
Solubility in / Miscibility with	
Water:	Unsoluble
pH-value:	Not applicable.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent separation test:	Not determined
Solvent content:	
Organic solvents:	0 %

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Additional information: None.

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:
No decomposition if used according to specifications.
Can decompose slowly with localised heating above 150°C
Dangerous reactions: Reacts with strong acids and oxidizing agents
Dangerous decomposition products:
Ammonia
Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:
LD/LC50 values relevant for classification:

Components	Type	Value	Species
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine			
Oral	LD50	1030 mg/kg (rat)	
Dermal	LD50	1840 mg/kg (rabbit)	
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol			
Oral	LD50	1670 mg/kg (rat)	
Dermal	LD50	1400 mg/kg (rabbit)	
100-51-6 Benzyl alcohol			
Oral	LD50	1230 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
Inhalative	LC50/4 h	4178 mg/l (rat)	
25620-58-0 Trimethylhexan-1,6-diamin			
Oral	LD50	910 mg/kg (rat)	
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)			
Oral	LD50	11400 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rabbit)	
26447-14-3 1,2-epoxy-3-(tolyloxy)propane			
Oral	LD50	> 2000 mg/kg (rat)	

Primary irritant effect:
on the skin: Caustic effect on skin and mucous membranes.
on the eye: Strong caustic effect.
Sensitization: Sensitization possible through skin contact.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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12 Ecological information:

Information about elimination (persistence and degradability):
Other information: The product is difficultly biodegradable.
Behaviour in environmental systems:

Mobility and bioaccumulation potential:	
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
EBAB	0,79 log Pow (-)
100-51-6 Benzyl alcohol	
EBAB	1,1 log Pow (Bioakkumulation)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	
EBAB (dynamic)	3,5 - 4 log Pow (Bioakkumulation)

Ecotoxical effects:
Acquatic toxicity:

Type of test Effective concentration Method Assessment	
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
EC 10/18h	1120 mg/l (pseudomonas putida)
EC50/24h	42 mg/l (Daphnia magna (großer Wasserfloh))
EC50/72h	37 mg/l (scenedesmus subspicatus (Alge))
LC50/48h	185 mg/l (Leuciscus idus (Goldorfe))
LC50/96h	110 mg/l (Brachydanio rerio (Zebrabärbling))
100-51-6 Benzyl alcohol	
EC 10	400 mg/l (pseudomonas putida)
EC50/24h	400 mg/l (Daphnia magna (großer Wasserfloh))
EC50/96h	640 mg/l (scenedesmus quadricauda (Alge))
LC50/48h	645 mg/l (Leuciscus idus (Goldorfe))
LC50/96h	10 mg/l (Lepomis macrochirus (Sonnenbarsch))
	460 mg/l (Pimephales promelas (Elritze))
25620-58-0 Trimethylhexan-1,6-diamin	
EC 10/16h	72 mg/l (pseudomonas putida)
EC50/24h	31,5 mg/l (Daphnia magna (großer Wasserfloh))
EC50/72h	29,5 mg/l (scenedesmus subspicatus (Alge))
LC0/48h	150 mg/l (Leuciscus idus (Goldorfe))
LC50/48h	174 mg/l (Leuciscus idus (Goldorfe))
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	
EC50/24h	1,1 - 3,6 mg/l (Daphnia magna (großer Wasserfloh))
EC50/96h	220 mg/l (Selenastrum capricornutum (Grünalge))
LC50/96h	1,5 - 7,7 mg/l (Oncorhynchus mykiss (rainbow trout))

Behaviour in sewage processing plants:

Type of test Effective concentration Method Assessment	
100-51-6 Benzyl alcohol	
EC 50 (3h)	79 mg/l (scenedesmus quadricauda (Alge))

Other information:	
100-51-6 Benzyl alcohol	
BSB (5)	1550 mg O2/g (-)

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General notes:
Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
Danger to drinking water if even small quantities leak into the ground.

*
13 Disposal considerations

Product:
Recommendation
After mixing with the resin component pour a partial amount back into the curing agent barrel, stir well and pour the mass back once more. Cured epoxy resin products are waste that requires no particular supervision and can as a rule be disposed of as commercial waste that is similar to household rubbish.

European waste catalogue	
07 02 08	other still bottoms and reaction residues

Uncleaned packaging:
Recommendation:
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: 8 (C7) Corrosive substances.
Danger code (Kemler): 80
UN-Number: 2735
Packaging group: III
Hazard label 8
Description of goods: 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE, TRIMETHYLHEXAMETHYLENEDIAMINES)

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 8
UN Number: 2735
Label 8
Packaging group: III
EMS Number: F-A,S-B
Marine pollutant: No

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Proper shipping name: P O L Y A M I N E S , L I Q U I D , C O R R O S I V E , N . O . S . (ISOPHORONEDIAMINE, TRIMETHYLHEXAMETHYLENEDIAMINES)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 8
UN/ID Number: 2735
Label 8
Packaging group: III
Proper shipping name: P O L Y A M I N E S , L I Q U I D , C O R R O S I V E , N . O . S . (ISOPHORONEDIAMINE, TRIMETHYLHEXAMETHYLENEDIAMINES)

*

15 Regulatory information

Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Observe the general safety regulations when handling chemicals.

Code letter and hazard designation of product:

C Corrosive

Hazard-determining components of labelling:
3-aminomethyl-3,5,5-trimethylcyclohexylamine
Trimethylhexan-1,6-diamin
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
1,2-epoxy-3-(tolyloxy)propane

Risk phrases:
21/22 Harmful in contact with skin and if swallowed.
34 Causes burns.
43 May cause sensitisation by skin contact.
68 Possible risk of irreversible effects.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
20 When using do not eat or drink.
23 Do not breathe fumes.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of soap and water.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Special labelling of certain preparations:
Contains epoxy constituents. See information supplied by the manufacturer.

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*
16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases
20/22 Harmful by inhalation and if swallowed.
21/22 Harmful in contact with skin and if swallowed.
22 Harmful if swallowed.
34 Causes burns.
36/38 Irritating to eyes and skin.
38 Irritating to skin.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
68 Possible risk of irreversible effects.

Department issuing MSDS: Product safety department
Contact: Mr Gilles Weber, Tel.: ++33(0)3 89 20 10 93
*** Data compared to the previous version altered.**