

Printing date 04.04.2007 Reviewed on 21.03.2007

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

Product details

Trade name Eurolan FK 20 Komp. A

Safety data sheet no.: 49PD10337-a/8

Application of the substance / the preparation Epoxy coating

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

2 Composition/information on ingredients

Chemical characterization

Description: Reaction resin based on bisphenol-A

Dangerous	Dangerous components:					
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, Xi, Xi, R 36/38-43-51/53	> 50%				
26447-14-3	1,2-epoxy-3-(tolyloxy)propane Xn, Xi, N; R 38-43-68-51/53	10 - 25%				

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

3 Hazards identification

Hazard description:





Xn Harmful

N Dangerous for the environment

Information concerning particular hazards for human and environment:

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitisation by skin contact.

R 68 Possible risk of irreversible effects.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Contains epoxy constituents. See information supplied by the manufacturer.

To avoid risks for humans and environment obtain instructions.

Classification system:

The classification is according to the latest editions of the

EU-lists, and extended by company and literature data.

ΕU



According to 91/155 EEC

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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 Drink plenty of water and provide fresh air. Call for a doctor 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:

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Carbon monoxide (CO)

Hydrogen chloride (HCI)

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not

enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in

accordance with official regulations.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Keep people at a distance and stay on the windward side.

Measures for environmental protection:

Inform respective authorities in case of seepage into water course or sewage system.

In case of seepage into the ground inform responsible authorities.

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).

Dispose of the material collected according to regulations.

Additional information: See Section 13 for disposal information.

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7 Handling and storage

Handling

Information for safe handling:

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

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.

Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Protect from frost.

Recommended storage temperature: 5-30°C.

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.

Do not eat, drink, smoke or sniff while working.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Use a moisturising skin cream after processing the product.

Keep away from foodstuffs, beverages and feed.

Respiratory protection:

Not necessary if room is well-ventilated.

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 A/P2.

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

Nitrile rubber, NBR

Butyl rubber, BR

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

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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: Colour: Odour:	Viscous According to product specification Characteristic
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Not determined Undetermined.
Flash point:	> 100°C (> 212°F) (DIN ISO 2592)
Ignition temperature:	300°C (572°F) (DIN 51794)
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Vapour pressure at 20°C (68°F)	: 2 hPa (2 mm Hg) (DIN 51640)
Density at 20°C (68°F):	1,14 g/cm³ (DIN 51757)
Bulk density:	Not applicable.
Solubility in / Miscibility with Water:	Unsoluble
pH-value:	Not applicable.
Viscosity: dynamic at 23°C (73°F): kinematic: Solvent content: Organic solvents:	975 mPas (DIN 53019) Not determined.

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

No decomposition if used and stored according to specifications.

Alkali can generate heavy polymerization at temperatures around 200°C.

Dangerous reactions:

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

Exothermic polymerization.

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:

Compo	nents	Туре	Value	Species	
25068-3		action product: bisphe blecular weight = 700)	nol-A-(epi	chlorhydrin)	epoxy resin (number average
Oral	LD50	11400 mg/kg (rat)			
Dermal	LD50	> 2000 mg/kg (rabbit)			
26447-1	4-3 1,	2-epoxy-3-(tolyloxy)prop	ane		
Oral	LD50	> 2000 mg/kg (rat)			

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)

EBAB (dynamic) 3,5 - 4 log Pow (Bioakkumulation)

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))

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

Remark: The product contains substnaces which de-activate activated sludge.

General notes:

The product contains materials that are harmful to the environment.

Do not allow product to reach ground water, water course or

sewage system.

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.

Dispose of packaging according to regulations on the disposal of packagings.

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):90UN-Number:3082Packaging group:IIIHazard label9

Description of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (Epoxy Resin, 1,2-epoxy-3-(tolyloxy)propane)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:9UN Number:3082Label9Packaging group:IIIEMS Number:F-A,S-FMarine pollutant:No

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Epoxy Resin, 1,2-epoxy-3-(tolyloxy)propane)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 9
UN/ID Number: 3082
Label 9
Packaging group: III
Packing instructions Passenger: 914

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Trade name Eurolan FK 20 Komp. A

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Packing instructions cargo: 914

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Epoxy Resin, 1,2-epoxy-3-(tolyloxy)propane)

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:





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.
- 68 Possible risk of irreversible effects.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- 2 Keep out of the reach of children.
- Do not breathe fumes.
- 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 water.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- If swallowed, seek medical advice immediately and show this container or label.

Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

To avoid risks for humans and environment obtain instructions.

National regulations

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

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

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. (Contd. on page 8)

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68 Possible risk of irreversible effects.

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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 Eurolan FK 20 Komp. B

Safety data sheet no.: 49PD10337-b/7

Application of the substance / the preparation Epoxy coating

Manufacturer/Supplier:

maxit France s.a.s 4 rue de Mulhouse Boîte Postale 27 F-68180 Hobourg-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

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%			
100-51-6	Benzyl alcohol	10 - 20%			
25620-58-0	Trimethylhexan-1,6-diamin ☐ C, Xn; R 22-34-43-52/53	10 - 20%			
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, Xi, Xi, 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:

R 21/22 Harmful in contact with skin and if swallowed.

R 34 Causes burns.

R 43 May cause sensitisation by skin contact.

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.

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Trade name Eurolan FK 20 Komp. B

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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.

Seek medical treatment.

After eve contact

Rinse opened eye for several minutes under running water. Then consult doctor. Rinse liquid should be tempered (20-30°C).

After swallowing Drink plenty of water and provide fresh air. Call for a doctor immediately.

Information for doctor

Hazards Danger of gastric perforation.

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:

During heating or in case of fire poisonous gases are produced.

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not

enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in

accordance with official regulations.

6 Accidental release measures

Person-related safety precautions:

Wear protective clothing.

Keep people at a distance and stay on the windward side.

Measures for environmental protection:

Inform respective authorities in case of seepage into water course or sewage system.

In case of seepage into the ground inform responsible authorities.

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).

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Dispose of the material collected according to regulations.

Additional information: See Section 13 for disposal information.

7 Handling and storage

Handling

Information for safe handling:

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

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.

Provide alkali-resistant floor.

Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Protect from frost.

Recommended storage temperature: 5-30°C.

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.

Avoid contact with the eyes and skin.

Be sure to clean skin thoroughly after work and before breaks.

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 A/P2.

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

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Material of gloves

Butyl rubber, BR 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.

9 Physical and chemical properties:

General Information	
Form: Colour: Odour:	Fluid According to product specification Characteristic
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. > 200°C (> 392°F) (DIN 0,08 ml/)
Flash point:	> 100°C (> 212°F) (DIN ISO 2592 0,08 ml/)
Ignition temperature:	Not determined
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Vapour pressure at 20°C (68°F)	: 0,1 hPa (0 mm Hg) (DIN 51640)
Density at 20°C (68°F):	0,97 g/cm³ (DIN 51757)
Bulk density:	Not applicable.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix
pH-value at 20°C (68°F):	11,0 (DIN 19261)
Viscosity: dynamic at 20°C (68°F): kinematic: Solvent content: Organic solvents:	150 mPas (DIN 53019) Not determined.

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous reactions:

Strong exothermic reaction with acids Reacts with strong oxidizing agents

Dangerous decomposition products: No dangerous decomposition products known.



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Trade name Eurolan FK 20 Komp. B

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11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Compone	nts	Туре	Value	Species		
2855-13-2	3-aminon	nethyl-3,5,5-trimethy	/lcyclohe	xylamine		
Oral	LD50	1030 mg/kg (rat)				
Dermal	LD50	1840 mg/kg (rabbit)				
100-51-6 E	Benzyl alc	ohol				
Oral	LD50	1230 mg/kg (rat)				
Dermal	LD50	2000 mg/kg (rabbit)				
Inhalative	LC50/4 h	4178 mg/l (rat)				
25620-58-	0 Trimeth	ylhexan-1,6-diamin				
Oral	LD50	910 mg/kg (rat)				
25068-38-			ol-A-(epic	chlorhydrin) epoxy resin (number average		
	molecul	ar weight = 700)				
Oral	LD50	11400 mg/kg (rat)				
Dermal	LD50	> 2000 mg/kg (rabbi	t)			
26447-14-	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.

12 Ecological information:

Information about elimination (persistence and degradability):

Other information: The product is difficultly biodegradable.

Behaviour in environmental systems:

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

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Ecotoxical effects:

Acquatic toxicity:

Acquatic to	oxicity:
Type of tes	st 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 B	enzyl 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)
	1,1 - 3,6 mg/l (Daphnia magna (großer Wasserfloh))
	220 mg/l (Selenastrum capricornutum (Grünalge))
LC50/96h	1,5 - 7,7 mg/l (Oncorhynchus mykiss (rainbow trout))

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

Behaviour in sewage processing plants:

Type of	test	Effec	tive	CO	ncentration	Method	Assessment

100-51-6 Benzyl alcohol

EC 50 (3h) 79 mg/l (scenedesmus quadricauda (Alge))

Remark: The product causes a significant pH change. Neutralise before introduction.

Other information:

100-51-6 Benzyl alcohol

BSB (5) 1550 mg O2/g (-)

General notes:

Do not allow product to reach ground water, water course or sewage system.

The product contains materials that are harmful to the environment.

Danger to drinking water if even small quantities leak into the ground.

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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.

Dispose of packaging according to regulations on the disposal of packagings.

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:8UN Number:2735Label8Packaging group:IIIEMS Number:F-A,S-BMarine pollutant:No

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE

TRIMETHYLHEXAMETHYLENEDIAMINES)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 8 UN/ID Number: 2735

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According to 91/155 EEC

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Trade name Eurolan FK 20 Komp. B

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Label 8
Packaging group: III
Packing instructions Passenger: 818
Packing instructions cargo: 820

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, 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:

- 2 Keep out of the reach of children.
- Do not breathe fumes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- After contact with skin, wash immediately with plenty of soap and water.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- If swallowed, seek medical advice immediately and show this container or label.

Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

National regulations

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

ΕU



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Trade name Eurolan FK 20 Komp. B

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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.**

ΕU



Printing date 04.04.2007 Reviewed on 21.03.2007

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

Product details

Trade name Eurolan FK 20 Komp. B

Safety data sheet no.: 49PD10337-b/7

Application of the substance / the preparation Epoxy coating

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

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%			
100-51-6	Benzyl alcohol	10 - 20%			
25620-58-0	Trimethylhexan-1,6-diamin ☐ C, Xn; R 22-34-43-52/53	10 - 20%			
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) XI, XI, XI, 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:

R 21/22 Harmful in contact with skin and if swallowed.

R 34 Causes burns.

R 43 May cause sensitisation by skin contact.

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.

(Contd. on page 2)



According to 91/155 EEC

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Trade name Eurolan FK 20 Komp. B

(Contd. of page 1)

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.

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 Drink plenty of water and provide fresh air. Call for a doctor immediately.

Information for doctor

Hazards Danger of gastric perforation.

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:

During heating or in case of fire poisonous gases are produced.

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not

enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in

accordance with official regulations.

6 Accidental release measures

Person-related safety precautions:

Wear protective clothing.

Keep people at a distance and stay on the windward side.

Measures for environmental protection:

Inform respective authorities in case of seepage into water course or sewage system.

In case of seepage into the ground inform responsible authorities.

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).

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Trade name Eurolan FK 20 Komp. B

(Contd. of page 2)

Dispose of the material collected according to regulations.

Additional information: See Section 13 for disposal information.

7 Handling and storage

Handling

Information for safe handling:

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

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.

Provide alkali-resistant floor.

Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Protect from frost.

Recommended storage temperature: 5-30°C.

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.

Avoid contact with the eyes and skin.

Be sure to clean skin thoroughly after work and before breaks.

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 A/P2.

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

(Contd. on page 4)



According to 91/155 EEC

Printing date 04.04.2007 Reviewed on 21.03.2007

Trade name Eurolan FK 20 Komp. B

(Contd. of page 3)

Material of gloves

Butyl rubber, BR 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.

9 Physical and chemical properties:

General Information		
Form: Colour: Odour:	Fluid According to product specification Characteristic	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. > 200°C (> 392°F) (DIN 0,08 ml/)	
Flash point:	> 100°C (> 212°F) (DIN ISO 2592 0,08 ml/)	
Ignition temperature:	Not determined	
Self-igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Vapour pressure at 20°C (68°F)	: 0,1 hPa (0 mm Hg) (DIN 51640)	
Density at 20°C (68°F):	0,97 g/cm³ (DIN 51757)	
Bulk density:	Not applicable.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix	
pH-value at 20°C (68°F):	11,0 (DIN 19261)	
Viscosity: dynamic at 20°C (68°F): kinematic: Solvent content: Organic solvents:	150 mPas (DIN 53019) Not determined. 0 %	

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous reactions:

Strong exothermic reaction with acids Reacts with strong oxidizing agents

Dangerous decomposition products: No dangerous decomposition products known.



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Trade name Eurolan FK 20 Komp. B

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11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Compone	nts	Туре	Value	Species		
2855-13-2	3-aminon	nethyl-3,5,5-trimethy	lcyclohe	xylamine		
Oral	LD50	1030 mg/kg (rat)				
Dermal	LD50	1840 mg/kg (rabbit)				
100-51-6 E	Benzyl alc	ohol				
Oral	LD50	1230 mg/kg (rat)				
Dermal	LD50	2000 mg/kg (rabbit)				
Inhalative	LC50/4 h	4178 mg/l (rat)				
25620-58-0	0 Trimeth	ylhexan-1,6-diamin				
Oral	LD50	910 mg/kg (rat)				
25068-38-0			ol-A-(epi	chlorhydrin) epoxy resin (number average		
	molecul	ar weight = 700)				
Oral	LD50	11400 mg/kg (rat)				
Dermal	LD50	> 2000 mg/kg (rabbit	t)			
26447-14-	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.

12 Ecological information:

Information about elimination (persistence and degradability):

Other information: The product is difficultly biodegradable.

Behaviour in environmental systems:

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

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Trade name Eurolan FK 20 Komp. B

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Ecotoxical effects:

Acquatic toxicity:

Acquatic to	Acquatic toxicity:								
Type of tes	Type of test Effective concentration Method Assessment								
2855-13-2	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 B	enzyl 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	25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average								
	molecular weight = 700)								
	1,1 - 3,6 mg/l (Daphnia magna (großer Wasserfloh))								
	220 mg/l (Selenastrum capricornutum (Grünalge))								
LC50/96h	1,5 - 7,7 mg/l (Oncorhynchus mykiss (rainbow trout))								

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

Behaviour in sewage processing plants:

Type of	test	Effec	tive	CO	ncentration	Method	Assessment

100-51-6 Benzyl alcohol

EC 50 (3h) 79 mg/l (scenedesmus quadricauda (Alge))

Remark: The product causes a significant pH change. Neutralise before introduction.

Other information:

100-51-6 Benzyl alcohol

BSB (5) 1550 mg O2/g (-)

General notes:

Do not allow product to reach ground water, water course or sewage system.

The product contains materials that are harmful to the environment.

Danger to drinking water if even small quantities leak into the ground.



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Trade name Eurolan FK 20 Komp. B

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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.

Dispose of packaging according to regulations on the disposal of packagings.

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: Ш Hazard label 8

Description of goods: 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE

TRIMETHYLHEXAMETHYLENEDIAMINES)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: **UN Number:** 2735 Label Packaging group: Ш F-A,S-B **EMS Number:** Marine pollutant: Nο

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE

TRIMETHYLHEXAMETHYLENEDIAMINES)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: UN/ID Number: 2735

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Printing date 04.04.2007 Reviewed on 21.03.2007

Trade name Eurolan FK 20 Komp. B

(Contd. of page 7)

Label 8
Packaging group: III
Packing instructions Passenger: 818
Packing instructions cargo: 820

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE

TRIMETHYLHEXAMETHYLENEDIAMINES)

15 Regulatory information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU

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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:

- 2 Keep out of the reach of children.
- Do not breathe fumes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- After contact with skin, wash immediately with plenty of soap and water.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- If swallowed, seek medical advice immediately and show this container or label.

Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

National regulations

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

EU



Printing date 04.04.2007 Reviewed on 21.03.2007

Trade name Eurolan FK 20 Komp. B

(Contd. of page 8)

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.**