

Material Safety Data Sheet According to 91/155 EEC

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 Deitermann Multipox FK Komp. A

Safety data sheet no.: 49PD10801-a/9

Application of the substance / the preparation Epoxy resin adhesive

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 and F

Dangerous components:			
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, Xi, R 36/38-43-51/53	10 - 25%	
28064-14-4	Bisphenole-F-Epichlorhydrine-Resin MG ≤ 700 Xi, Xi, R 36/38-43-51/53	5 - 10%	
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Xi, 🞇 N; R 36/38-43-51/53	5 - 10%	

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

3 Hazards identification

Hazard description:





Xi Irritant

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.

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.

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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.

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 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

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:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Particular danger of slipping on leaked/spilled product.

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).

Ensure adequate ventilation.

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.

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

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Information about fire - and explosion protection: No special measures required.

Storage

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in unopened original receptacles.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from foodstuffs.

Further information about storage conditions:

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored 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 or drink while working.

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.

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 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

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 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.

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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. Undetermined.	
Flash point:	> 100°C (> 212°F) (DIN ISO 2592)	
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):	1,506 g/cm³ (DIN 51757)	
Bulk density:	Not applicable.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix	
pH-value:	Not applicable.	
Viscosity: dynamic: kinematic:	Not determined. Not determined.	
Solvent separation test: Solvent content: Organic solvents:	Not determined 0,3 %	
Additional information:	None.	

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous reactions:

Reacts with amines

Reacts with acids, alkalis and oxidizing agents

Dangerous decomposition products: No dangerous decomposition products known.

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Trade name Deitermann Multipox FK Komp. A

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11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Compo	nents	Туре	Value	Species	
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)				epoxy resin (number average	
Oral	LD50	11400 mg/kg (rat)			
Dermal	LD50	> 2000 mg/kg (rabbit)			
28064- 1	28064-14-4 Bisphenole-F-Epichlorhydrine-Resin MG ≤ 700				
Oral	LD50	23800 mg/kg (rat)			
Dermal	LD50	> 2000 mg/kg (rabbit)			
68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs					
Oral	LD50	> 5000 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:

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))

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

EC50/48h 1-10 mg/l (Daphnia magna (großer Wasserfloh))

LC50/96h 1-10 mg/l (fish)

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

General notes:

Also poisonous for fish and plankton in water bodies.

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.

Recommended cleaning agent: Water, if necessary together with cleansing agents.

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

Description of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Epoxy Resin)

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)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 9
UN/ID Number: 3082
Label 9
Packaging group: III

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Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Epoxy Resin)

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:





Xi Irritant

N Dangerous for the environment

Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Bisphenole-F-Epichlorhydrine-Resin $MG \le 700$ oxirane, mono[(C12-14-alkyloxy)methyl] derivs

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.

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.
- 46 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.

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.

43 May cause sensitisation by skin contact.

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

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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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 Deitermann Multipox FK Komp.B

Safety data sheet no.: 49PD10801-b/11

Application of the substance / the preparation Epoxy resin adhesive

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:		
	Polyaminoamid	5 - 10%
	Xi; R 36/37/38-43	
65997-15-1	cement, portland, white	2 - 5%
	Xi; R 38-41	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	2 - 5%
	<u>□</u> C, Xn; R 21/22-34-43-52/53	

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

3 Hazards identification

Hazard description:



Xi Irritant

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.

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.

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Trade name Deitermann Multipox FK Komp.B

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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 eve 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 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

Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Particular danger of slipping on leaked/spilled product.

Measures for environmental protection:

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

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

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.

Keep receptacles tightly sealed.

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.

Store in a cool location.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from foodstuffs.

Further information about storage conditions:

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

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Trade name Deitermann Multipox FK Komp.B

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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.

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.

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 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

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: Fluid

Colour: According to product specification

Odour: Characteristic

Change in condition

Melting point/Melting range: Undetermined.

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Trade name Deitermann Multipox FK Komp.B

		(Contd. of page 3)
Boiling point/Boiling range:	> 100°C (> 212°F) (DIN)	
Flash point: > 100°C (> 212°F) (DIN ISO 2592)		
Self-igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Density at 20°C (68°F):	1,666 g/cm³ (DIN 51757)	
Bulk density:	Not applicable.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix	
pH-value:	Not applicable.	
Viscosity: dynamic: kinematic:	Not determined. Not determined.	
Solvent separation test: Solvent content: Organic solvents:	Not determined 0,1 %	
Additional information:	None.	

10 Stability and reactivity

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous reactions: Reacts with acids, alkalis and oxidizing agents

Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Compo	nents	Type Value Species
2855-13	3-2 3-aı	minomethyl-3,5,5-trimethylcyclohexylamine
Oral	LD50	1030 mg/kg (rat)
Dermal	LD50	1840 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:

Irritant

12 Ecological information:

Information about elimination (persistence and degradability):

Other information: The product is difficultly biodegradable.

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Behaviour in environmental systems:

Mobility and bioaccumulation potential:

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

EBAB 0,79 log Pow (-)

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))		

General notes:

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

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.

Recommended cleaning agent: Water, if necessary together with cleansing agents.

14 Transport information

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

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class:

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:

Transport/Additional information: Not dangerous according to the above specifications.



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According to 31/103 EEO

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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:



Xi Irritant

Hazard-determining components of labelling:

Polyaminoamid

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Risk phrases:

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

Safety phrases:

2 Keep out of the reach of children.

24/25 Avoid contact with skin and eyes.

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.

46 If swallowed, seek medical advice immediately and show this container or label.

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

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

34 Causes burns.

36/37/38 Irritating to eyes, respiratory system and skin.

38 Irritating to skin.

41 Risk of serious damage to eyes.

43 May cause sensitisation by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.