



Safety Data Sheet according to Regulation (EC) No1907/2006

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SDS No. : 204375

V004.1

3423 A 1KG FR NL

Revision: 26.03.2014

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

1.1. Product identifier

3423 A 1KG FR NL

Contains:

Reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight $\leq$ 700)

Epichlorohydrin-sorbitol copolymer

RP Bisphenol F-epichlorohydrin resin, MW $\leq$ 700

Castor oil, polymer with bisphenol A and epichlorohydrin

p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether

Oxirane, mono[(C12-14-alkyloxy)methyl] derivatives

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

Intended use:

Epoxy adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Limited

2 Bishop Square Business Park

AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933

Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Chronic hazards to the aquatic environment	Category 2
H411 Toxic to aquatic life with long lasting effects.	

Classification (DPD):

Xi - Irritant
R36/38 Irritating to eyes and skin.
Sensitizing
R43 May cause sensitisation by skin contact.
N - Dangerous for the environment
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:		
Signal word:	Warning	
Hazard statement:	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.	
Precautionary statement:	P273 Avoid release to the environment. P280 Wear protective gloves.	
Precautionary statement:	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.	
Response		

Label elements (DPD):

Xi - Irritant

N - Dangerous for the environment



Risk phrases:

R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S24 Avoid contact with skin.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water and soap.
S37 Wear suitable gloves.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

Contains epoxy constituents. See information supplied by the manufacturer.

Contains:

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700),
Epichlorohydrin-sorbitol copolymer,
RP Bisphenol F-epichlorohydrin resin, MW ≤ 700 ,
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether,
Oxirane, mono[(C12-14-alkyloxy)methyl] derivatives,
Castor oil, polymer with bisphenol A and epichlorohydrin

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients
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General chemical description:

Epoxy resin

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Reaction product: bisphenol-A- (epichlorohydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	>= 10- < 20 %	Skin irritation 2 H315 Skin sensitizer 1 H317 Serious eye irritation 2 H319 Chronic hazards to the aquatic environment 2 H411
Epichlorohydrin-sorbitol copolymer 29994-68-1		>= 10- < 20 %	Serious eye damage/eye irritation 2 H319 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 3 H412
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4		>= 10- < 20 %	Serious eye irritation 2 H319 Skin irritation 2 H315 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 2 H411
Castor oil, polymer with bisphenol A and epichlorohydrin 68513-59-7		>= 10- < 20 %	Serious eye irritation 2 H319 Skin irritation 2 H315 Skin sensitizer 1 H317
Aluminium powder (stabilised) 7429-90-5	231-072-3 01-2119529243-45	>= 5- < 15 %	Substances and mixtures, which on contact with water, emit flammable gases 2 H261 Flammable solids 1 H228
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	221-453-2	>= 1- < 2,5 %	Skin irritation 2; Dermal H315 Skin sensitizer 1; Dermal H317 Serious eye irritation 2 H319 Chronic hazards to the aquatic environment 2 H411
Oxirane, mono[(C12-14-alkyloxy)methyl] derivates 68609-97-2	271-846-8 01-2119485289-22	>= 1- < 2,5 %	Skin irritation 2 H315 Skin sensitizer 1 H317

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Reaction product: bisphenol-A- (epichlorohydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	>= 10 - < 20 %	R43 Xi - Irritant; R36/38 N - Dangerous for the environment; R51/53
Epichlorohydrin-sorbitol copolymer 29994-68-1		>= 10 - < 20 %	Xi - Irritant; R36, R43 R52/53
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4		>= 10 - < 20 %	Xi - Irritant; R36/38, R43 N - Dangerous for the environment; R51/53
Castor oil, polymer with bisphenol A and epichlorohydrin 68513-59-7		>= 10 - < 20 %	Xi - Irritant; R36/38, R43
Aluminium powder (stabilised) 7429-90-5	231-072-3 01-2119529243-45	>= 5 - < 15 %	F - Highly flammable; R11, R15
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	221-453-2	>= 1 - < 2,5 %	Xi - Irritant; R36/38, R43 N - Dangerous for the environment; R51/53
Oxirane, mono[(C12-14- alkyloxy)methyl] derivates 68609-97-2	271-846-8 01-2119485289-22	>= 1 - < 2,5 %	R43 Xi - Irritant; R38

**For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.**

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media:**

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Wash spillage site thoroughly with soap and water or detergent solution.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

7.3. Specific end use(s)

Epoxy adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
ALUMINIUM METAL, RESPIRABLE DUST 7429-90-5		4	Time Weighted Average (TWA):		EH40 WEL
ALUMINIUM METAL, INHALABLE DUST 7429-90-5		10	Time Weighted Average (TWA):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)					0,006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)					0,0006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (intermittent releases)					0,018 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	STP					10 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)				0,996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)				0,0996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil				0,196 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral					11 mg/kg food	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	Dermal	Acute/short term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	Dermal	Long term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Acute/short term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Long term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	inhalation	Long term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Long term exposure - systemic effects		0,75 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	Dermal	Acute/short term exposure - systemic effects		17 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	inhalation	Acute/short term exposure - systemic effects		29 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	Dermal	Acute/short term exposure - local effects		68 mg/cm2	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	inhalation	Acute/short term exposure - local effects		9,8 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	Dermal	Long term exposure - systemic effects		3,9 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	inhalation	Long term exposure - systemic effects		13,8 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	Dermal	Long term exposure - local effects		1,7 mg/cm2	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	worker	inhalation	Long term exposure - local effects		0,98 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	Dermal	Acute/short term exposure - systemic effects		10 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	inhalation	Acute/short term exposure - systemic effects		7,6 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl]	general	oral	Acute/short term		1219 mg/kg bw/day	

derivs. 68609-97-2	population		exposure - systemic effects			
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	Dermal	Acute/short term exposure - local effects		40 mg/cm2	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	inhalation	Acute/short term exposure - local effects		2,9 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	Dermal	Long term exposure - systemic effects		2,35 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	inhalation	Long term exposure - systemic effects		4,1 mg/m3	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	oral	Long term exposure - systemic effects		1 mg/kg bw/day	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	Dermal	Long term exposure - local effects		1 mg/cm2	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 68609-97-2	general population	inhalation	Long term exposure - local effects		1,46 mg/m3	

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance

paste

Odor

grey

Mild

Odour threshold

No data available / Not applicable

pH

6

0

Initial boiling point

200 °C (392 °F)

Flash point

> 200 °C (> 392 °F)

Decomposition temperature	No data available / Not applicable
Vapour pressure	0,001 mbar
Density	1,36 g/cm ³
0	
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Insoluble
(Solvent: Water)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

None if used properly.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if used according to specifications.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

May cause irritation to respiratory system.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	15.000 mg/kg	oral		rat	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	LD50	> 10.000 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	23.000 mg/kg	dermal		rabbit	
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4	LD50	> 6.000 mg/kg	dermal		rabbit	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	LD50	> 46.400 mg/kg	dermal		rat	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
Oxirane, mono[(C12-14- alkyloxy)methyl] derivates 68609-97-2	negative	mammalian cell gene mutation assay			OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Oxirane, mono[(C12-14- alkyloxy)methyl] derivates 68609-97-2	negative				OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Toxic to aquatic life with long lasting effects.

Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Epichlorohydrin-sorbitol copolymer 29994-68-1	LC50	67 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Epichlorohydrin-sorbitol copolymer 29994-68-1	EC50	90 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4	EC50	3,5 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Aluminium powder (stabilised) 7429-90-5	NOEC	> 100 mg/l	Fish	96 h	Salmo trutta	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxirane, mono[(C12-14-alkyloxy)methyl] derivates 68609-97-2	LC50	1 - 10 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxirane, mono[(C12-14-alkyloxy)methyl] derivates 68609-97-2	EC50	1 - 10 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Epichlorohydrin-sorbitol copolymer 29994-68-1		aerobic	8 - 27 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4		aerobic	10 - 16 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Oxirane, mono[(C12-14- alkyloxy)methyl] derivatives 68609-97-2		aerobic	< 10 %	OECD 301 A - F

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Aluminium powder (stabilised) 7429-90-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Oxirane, mono[(C12-14-alkyloxy)methyl] derivates 68609-97-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Product disposal:**

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

SECTION 14: Transport information**14.1. UN number**

ADR	3082
RID	3082
ADNR	3082
IMDG	3082
IATA	3082

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
ADNR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADNR	9
IMDG	9
IATA	9

14.4. Packaging group

ADR	III
RID	III
ADNR	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable Tunnelcode: (E)
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

VOC content (1999/13/EC)	< 3,00 %
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15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- R11 Highly flammable.
- R15 Contact with water liberates extremely flammable gases.
- R36 Irritating to eyes.
- R36/38 Irritating to eyes and skin.
- R38 Irritating to skin.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- H228 Flammable solid.
- H261 In contact with water releases flammable gas.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.