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

SDS No. : 204340
V005.1

Loctite 9492A Kit component

Revision: 26.03.2014
printing date: 15.12.2014

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

1.1. Product identifier
Loctite 9492A Kit component

Contains:
Bisphenol-F epichlorhydrin resin; MW<700
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
2-Component 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):

Sensitizing
R43 May cause sensitisation by skin contact.
Xi - Irritant
R36/38 Irritating to eyes and skin.
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: Prevention	P273 Avoid release to the environment. P280 Wear protective gloves.
Precautionary statement: Response	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.

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.
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:
Bisphenol-F epichlorhydrin resin; MW<700,
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

2.3. Other hazards
None if used properly.

SECTION 3: Composition/information on ingredients

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	500-006-8 500-006-8 01-2119454392-40	>= 30- < 50 %	Skin irritation 2; Dermal H315 Skin sensitizer 1; Dermal H317 Chronic hazards to the aquatic environment 2 H411
Reaction product: bisphenol-A-(epichlorhydrin); 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

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
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	500-006-8 500-006-8 01-2119454392-40	>= 30 - < 50 %	Xi - Irritant; R38, R43 N - Dangerous for the environment; R51/53
Reaction product: bisphenol-A-(epichlorhydrin); 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

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.
Seek medical advice.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:
Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
Seek medical advice.

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:
High pressure waterjet

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 (NOx) can be released.

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

Additional information:
In case of fire, keep containers cool with water spray.

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.
Dispose of contaminated material as waste according to Section 13.

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.
See advice in section 8

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)
2-Component epoxy adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient	ppm	mg/m³	Type	Category	Remarks
TALC, RESPIRABLE DUST 14807-96-6		1	Time Weighted Average (TWA):		EH40 WEL
TITANIUM DIOXIDE, TOTAL INHALABLE 13463-67-7		10	Time Weighted Average (TWA):		EH40 WEL
TITANIUM DIOXIDE, RESPIRABLE 13463-67-7		4	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-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (freshwater)					0,003 mg/L	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (marine water)					0,0003 mg/L	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	STP					10 mg/L	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	sediment (freshwater)				0,294 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	sediment (marine water)				0,0294 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	soil				0,237 mg/kg		
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	aqua (intermittent releases)					0,0254 mg/L	
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-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	worker	Dermal	Acute/short term exposure - local effects		0,0083 mg/cm2	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	worker	Dermal	Long term exposure - systemic effects		104,15 mg/kg bw/day	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	worker	inhalation	Long term exposure - systemic effects		29,39 mg/m3	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	general population	Dermal	Long term exposure - systemic effects		62,5 mg/kg bw/day	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	general population	inhalation	Long term exposure - systemic effects		8,7 mg/m3	
Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 9003-36-5	general population	oral	Long term exposure - systemic effects		6,25 mg/kg bw/day	
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	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

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:
Protective goggles

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste grey, opaque
Odor	odorless
Odour threshold	No data available / Not applicable
pH	Not applicable
Initial boiling point	> 260,0 °C (> 500 °F)
Flash point	> 248,0 °C (> 478.4 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	< 0,0300000 mbar
Density ()	1,5200 - 1,5600 g/cm3
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) (Solvent: Water)	Insoluble
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
Reaction with strong acids.
Reacts with strong oxidants.

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
See section reactivity

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
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	LD50	> 2.000 mg/kg	oral		rat	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LD50	15.000 mg/kg	oral		rat	

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	

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)

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
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	1,6 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	EC50	1,8 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
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)

12.2. Persistence and degradability

Persistence and Biodegradability:
The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5		aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:
Cured adhesives are immobile.

Bioaccumulative potential:
No data available for the product.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Bisphenol-F epichlorhydrin resin; MW<700 9003-36-5	Not fulfilling PBT (persistent/bioaccummulative/toxic) criteria
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	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
The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

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. (Bisphenol-F Epichlorhydrin resin,Bisphenol-A Epichlorhydrin resin)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-F Epichlorhydrin resin,Bisphenol-A Epichlorhydrin resin)
ADNR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-F Epichlorhydrin resin,Bisphenol-A Epichlorhydrin resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-F Epichlorhydrin resin,Bisphenol-A Epichlorhydrin resin)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-F Epichlorhydrin resin,Bisphenol-A Epichlorhydrin 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 < 3,00 %
(1999/13/EC)

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:

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.
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.

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.

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

SDS No. : 204341
V004.1

Loctite 9492B Kit component

Revision: 19.09.2014
printing date: 15.12.2014

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

1.1. Product identifier
Loctite 9492B Kit component

Contains:
4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine
Diethylenetriamine
m-Phenylenebis(methylamine)
4,4'-Isopropylidenediphenol
N-(3-(Trimethoxysilyl)propyl)ethylenediamine

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
Epoxy Hardener

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):

Acute toxicity	Category 4
H302 Harmful if swallowed.	
Route of Exposure: Oral	
Skin corrosion	Category 1B
H314 Causes severe skin burns and eye damage.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Toxic to reproduction	Category 2
H361f Suspected of damaging fertility.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

Classification (DPD):

Xn - Harmful

R21/22 Harmful in contact with skin and if swallowed.

C - Corrosive

R34 Causes burns.

Sensitizing

R43 May cause sensitisation by skin contact.

Dangerous for the environment

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361f Suspected of damaging fertility. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement: Prevention	P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment.
Precautionary statement: Response	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. P310 Immediately call a POISON CENTER or doctor. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Label elements (DPD):

C - Corrosive

Risk phrases:

R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R52/53 Harmful 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.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S51 Use only in well-ventilated areas.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains:

4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine,
Diethylenetriamine,
m-Phenylenebis(methylamine),
4,4'-Isopropylidenediphenol

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Part B of a two part adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine 31326-29-1	500-072-8	>= 25- < 40 %	Acute toxicity 4 H302 Acute toxicity 4 H312 Skin corrosion 1B H314 Skin sensitizer 1 H317
Diethylenetriamine 111-40-0	203-865-4 01-2119473793-27	>= 5- < 10 %	Acute toxicity 4; Dermal H312 Acute toxicity 4; Oral H302 Skin sensitizer 1 H317 Skin corrosion 1B H314
m-Phenylenebis(methylamine) 1477-55-0	216-032-5 01-2119480150-50	>= 5- < 10 %	Acute toxicity 4; Oral H302 Skin corrosion 1B H314 Skin sensitizer 1; Dermal H317 Acute toxicity 4; Inhalation H332 Chronic hazards to the aquatic environment 3 H412
4,4'-Isopropylidenediphenol 80-05-7	201-245-8 01-2119457856-23	>= 3- < 5 %	Toxic to reproduction 2 H361f Specific target organ toxicity - single exposure 3 H335 Serious eye damage 1 H318 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 2 H411
Benzyl alcohol 100-51-6	202-859-9 01-2119492630-38	1- < 3 %	Acute toxicity 4; Oral H302 Acute toxicity 4; Inhalation H332 Serious eye irritation 2 H319
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	217-164-6 01-2119970215-39	>= 0,1- < 1 %	Skin sensitizer 1; Dermal H317 Serious eye damage/eye irritation 1 H318 Acute toxicity 4; Inhalation H332
Nonylphenol 25154-52-3	246-672-0	>= 0,25- < 1 %	Toxic to reproduction 2 H361fd Acute toxicity 4; Oral H302 Skin corrosion 1B H314 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410

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
4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine 31326-29-1	500-072-8	>= 25 - < 40 %	Xn - Harmful; R21/22 Xi - Irritant; R43 C - Corrosive; R34
Diethylenetriamine 111-40-0	203-865-4 01-2119473793-27	>= 5 - < 10 %	Xn - Harmful; R21/22 C - Corrosive; R34 R43
m-Phenylenebis(methylamine) 1477-55-0	216-032-5 01-2119480150-50	>= 5 - < 10 %	Xn - Harmful; R20 Xn - Harmful; R22 C - Corrosive; R34 Xi - Irritant; R43 R52/53
4,4'-Isopropylidenediphenol 80-05-7	201-245-8 01-2119457856-23	>= 3 - < 5 %	Toxic for reproduction - category 3.; R62 Xi - Irritant; R37, R41 R43 R52
Benzyl alcohol 100-51-6	202-859-9 01-2119492630-38	1 - < 3 %	Xn - Harmful; R20/22
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	217-164-6 01-2119970215-39	>= 0,1 - < 1 %	N - Dangerous for the environment; R51/53 Xn - Harmful; R20 Xi - Irritant; R41, R43
Nonylphenol 25154-52-3	246-672-0	>= 0,25 - < 1 %	Toxic for reproduction - category 3.; R62, R63 Xn - Harmful; R22 C - Corrosive; R34 N - Dangerous for the environment; R50/53

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: Rash, Urticaria.

Causes burns.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

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
None
carbon oxides.

5.3. Advice for firefighters
Wear self-contained breathing apparatus.
Wear protective equipment.

Additional information:
In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Avoid skin and eye contact.
Wear protective equipment.

6.2. Environmental precautions
Do not let product enter drains.

6.3. Methods and material for containment and cleaning up
For large spills absorb onto inert absorbent material and place in sealed container for disposal.
Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid skin and eye contact.
Use only in well-ventilated areas.
Gloves and safety glasses should be worn
Do not inhale vapors and fumes.

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 sealed original container.
Store in a cool, well-ventilated place.

7.3. Specific end use(s)
Epoxy Hardener

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient	ppm	mg/m³	Type	Category	Remarks
TALC, RESPIRABLE DUST 14807-96-6		1	Time Weighted Average (TWA):		EH40 WEL
2,2'-IMINODI(ETHYLAMINE) 111-40-0			Skin designation:	Can be absorbed through the skin.	EH40 WEL
2,2'-IMINODI(ETHYLAMINE) 111-40-0	1	4,3	Time Weighted Average (TWA):		EH40 WEL
BISPHENOL A, INHALABLE DUST 80-05-7		10	Time Weighted Average (TWA):		EH40 WEL
BISPHENOL A (INHALABLE DUST) 80-05-7		10	Time Weighted Average (TWA):	Indicative	ECTLV

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (freshwater)					0,56 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (marine water)					0,056 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	aqua (intermittent releases)					0,32 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	sediment (freshwater)				1072 mg/kg		
2,2'-Iminodi(ethylamine) 111-40-0	sediment (marine water)				107,2 mg/kg		
2,2'-Iminodi(ethylamine) 111-40-0	STP					6 mg/L	
2,2'-Iminodi(ethylamine) 111-40-0	soil				214 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	aqua (freshwater)					0,094 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	aqua (marine water)					0,0094 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	aqua (intermittent releases)					0,152 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	STP					10 mg/L	
m-Phenylenebis(methylamine) 1477-55-0	sediment (freshwater)				0,43 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	sediment (marine water)				0,043 mg/kg		
m-Phenylenebis(methylamine) 1477-55-0	soil				0,045 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	aqua (freshwater)					0,018 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	aqua (marine water)					0,016 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	aqua (intermittent releases)					0,01 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	STP					320 mg/L	
4,4'-Isopropylidenediphenol 80-05-7	sediment (freshwater)				2,2 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	sediment (marine water)				0,44 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	soil				3,7 mg/kg		
4,4'-Isopropylidenediphenol 80-05-7	oral					13,8 mg/kg food	
Benzyl alcohol 100-51-6	soil				0,456 mg/kg		
Benzyl alcohol 100-51-6	STP					39 mg/L	
Benzyl alcohol 100-51-6	sediment (freshwater)				5,27 mg/kg		
Benzyl alcohol 100-51-6	sediment (marine water)				0,527 mg/kg		
Benzyl alcohol 100-51-6	aqua (marine water)					0,1 mg/L	
Benzyl alcohol 100-51-6	aqua (intermittent releases)					2,3 mg/L	
Benzyl alcohol 100-51-6	aqua (freshwater)					1 mg/L	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-Iminodi(ethylamine) 111-40-0	worker	Dermal	Long term exposure - systemic effects		11,4 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	worker	Dermal	Long term exposure - local effects		1,1 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	worker	inhalation	Acute/short term exposure - systemic effects		92,1 mg/m3	
2,2'-Iminodi(ethylamine) 111-40-0	worker	inhalation	Acute/short term exposure - local effects		2,6 mg/m3	
2,2'-Iminodi(ethylamine) 111-40-0	worker	inhalation	Long term exposure - systemic effects		15,4 mg/m3	
2,2'-Iminodi(ethylamine) 111-40-0	worker	inhalation	Long term exposure - local effects		0,87 mg/m3	
2,2'-Iminodi(ethylamine) 111-40-0	general population	oral	Acute/short term exposure - local effects		4,88 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	general population	inhalation	Acute/short term exposure - systemic effects		27,5 mg/m3	
2,2'-Iminodi(ethylamine) 111-40-0	general population	Dermal	Long term exposure - systemic effects		4,88 mg/kg	
2,2'-Iminodi(ethylamine) 111-40-0	general population	inhalation	Long term exposure - systemic effects		4,6 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	worker	Dermal	Acute/short term exposure - systemic effects		1,4 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	worker	inhalation	Acute/short term exposure - local effects		10 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	worker	Dermal	Long term exposure - systemic effects		1,4 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	worker	inhalation	Long term exposure - local effects		10 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	worker	inhalation	Acute/short term exposure - systemic effects		10 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	worker	inhalation	Long term exposure - systemic effects		10 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	general population	Dermal	Acute/short term exposure - systemic effects		0,7 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	general population	inhalation	Acute/short term exposure - systemic effects		5,0 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	general population	oral	Acute/short term exposure - systemic effects		0,05 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	general population	Dermal	Long term exposure - systemic effects		0,7 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	general population	inhalation	Long term exposure - systemic effects		0,25 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	general population	oral	Long term exposure - systemic effects		0,05 mg/kg bw/day	
4,4'-Isopropylidenediphenol 80-05-7	general population	inhalation	Long term exposure - local effects		5 mg/m3	
4,4'-Isopropylidenediphenol 80-05-7	general population	inhalation	Acute/short term exposure - local		5 mg/m3	

			effects			
Benzyl alcohol 100-51-6	general population	oral	Acute/short term exposure - systemic effects		25 mg/kg bw/day	
Benzyl alcohol 100-51-6	general population	oral	Long term exposure - systemic effects		5 mg/kg bw/day	
Benzyl alcohol 100-51-6	worker	inhalation	Acute/short term exposure - systemic effects		450 mg/m3	
Benzyl alcohol 100-51-6	worker	inhalation	Long term exposure - systemic effects		90 mg/m3	
Benzyl alcohol 100-51-6	general population	inhalation	Acute/short term exposure - systemic effects		40 mg/m3	
Benzyl alcohol 100-51-6	general population	inhalation	Long term exposure - systemic effects		8,11 mg/m3	
Benzyl alcohol 100-51-6	worker	Dermal	Acute/short term exposure - systemic effects		47 mg/kg bw/day	
Benzyl alcohol 100-51-6	worker	Dermal	Long term exposure - systemic effects		9,5 mg/kg bw/day	
Benzyl alcohol 100-51-6	general population	Dermal	Acute/short term exposure - systemic effects		28,5 mg/kg bw/day	
Benzyl alcohol 100-51-6	general population	Dermal	Long term exposure - systemic effects		5,7 mg/kg bw/day	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

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:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid grey, opaque
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 200,0 °C (> 392 °F)
Flash point	> 100,0 °C (> 212 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (50 °C (122 °F))	< 1,3300000 mbar
Density ()	1,5000 - 1,5800 g/cm3
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) (Solvent: Water)	Partially soluble
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

Reacts with water: generation of heat.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.
Avoid contact with acids and oxidizing agents.
Avoid contact with water.

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:
Harmful if swallowed.

Inhalative toxicity:
May cause irritation to respiratory system.

Skin irritation:
Causes severe skin burns and eye damage.

Eye irritation:
Avoid eye contact.
Corrosive

Sensitizing:
May cause an allergic skin reaction.

Reproductive toxicity:
Suspected of damaging fertility.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Diethylenetriamine 111-40-0	LD50	1.553 mg/kg	oral		rat	
4,4'-Isopropylidenediphenol 80-05-7	LD50	5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Benzyl alcohol 100-51-6	LD50	1.620 mg/kg	oral		rat	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LD50	> 2.000 mg/kg	oral		rat	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LD50	2.413 mg/kg			rat	
Nonylphenol 25154-52-3	LD50	1.900 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
m-Phenylenebis(methylamine) 1477-55-0	LC50	1,16 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Benzyl alcohol 100-51-6	Acute toxicity estimate (ATE)	4,17 mg/l	inhalation			Expert judgement
Benzyl alcohol 100-51-6	LC50	> 4,178 mg/l		4 h	rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Diethylenetriamine 111-40-0	LD50	1.045 mg/kg	dermal		rabbit	
4,4'-Isopropylidenediphenol 80-05-7	LD50	3.600 mg/kg	dermal		rabbit	
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LD50	> 2.009 mg/kg	dermal		rat	
Nonylphenol 25154-52-3	LD50	> 2.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethylenetriamine 111-40-0	corrosive	15 min	rabbit	BASF Test
Benzyl alcohol 100-51-6	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Nonylphenol 25154-52-3	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethylenetriamine 111-40-0	corrosive	30 s	rabbit	
Benzyl alcohol 100-51-6	Category II	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Nonylphenol 25154-52-3	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Diethylenetriamine 111-40-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
m-Phenylenebis(methylamine) 1477-55-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Benzyl alcohol 100-51-6	not sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	sensitising	Mouse local lymphnode assay (LLNA)	guinea pig	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Nonylphenol 25154-52-3	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Nonylphenol 25154-52-3	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
m-Phenylenebis(methylamine) 1477-55-0	negative	in vitro mammalian chromosome aberration test	with and without		
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
4,4'-Isopropylidenediphenol 80-05-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Benzyl alcohol 100-51-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Nonylphenol 25154-52-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		Ames Test

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
m-Phenylenebis(methylamine) 1477-55-0	LOAEL=>= 600 mg/kg	oral: gavage	28 days daily	rat	Guidelines for 28-Day Repeat Dose Toxicity Test (Japan)
Nonylphenol 25154-52-3	NOAEL=100 mg/kg	oral: feed	28 days daily	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

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:

Harmful 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
Diethylenetriamine 111-40-0	LC50	> 9,8 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Diethylenetriamine 111-40-0	EC50	64,6 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Diethylenetriamine 111-40-0	EC50	187 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	EU Method C.3 (Algal Inhibition test)
	NOEC	10,2 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	EU Method C.3 (Algal Inhibition test)
m-Phenylenebis(methylamine) 1477-55-0	LC50	> 100 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
m-Phenylenebis(methylamine) 1477-55-0	EC50	16 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
m-Phenylenebis(methylamine) 1477-55-0	NOEC	22,9 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	33,3 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
m-Phenylenebis(methylamine) 1477-55-0	NOEC	4,7 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
4,4'-Isopropylidenediphenol 80-05-7	NOEC	16 µg/l	Fish	444 d	Pimephales promelas	EPA OPP 72-5 (Fish Life Cycle Toxicity)
	LC50	9,9 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'-Isopropylidenediphenol 80-05-7	EC50	3,9 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'-Isopropylidenediphenol 80-05-7	EC50	2,5 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'-Isopropylidenediphenol 80-05-7	NOEC	> 3,146 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Benzyl alcohol 100-51-6	LC50	646 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Benzyl alcohol 100-51-6	EC50	360 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzyl alcohol 100-51-6	EC50	640 mg/l	Algae	96 h	Scenedesmus quadricauda	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	LC50	168 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	EC50	87,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	NOEC	3,1 mg/l	Algae	96 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	8,8 mg/l	Algae	96 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N-(3-(Trimethoxysilyl)propyl)ethyl	NOEC	> 1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna,

enediamine 1760-24-3						Reproduction Test)
Nonylphenol 25154-52-3	LC50	0,23 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
	NOEC	0,006 mg/l	Fish	91 d	no data	OECD 210 (fish early lite stage toxicity test)
Nonylphenol 25154-52-3	EC50	0,14 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Nonylphenol 25154-52-3	EC50	1,3 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:
The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Diethylenetriamine 111-40-0		aerobic	2 - 5 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)
4,4'-Isopropylidenediphenol 80-05-7	readily biodegradable	aerobic	89 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Benzyl alcohol 100-51-6	readily biodegradable	aerobic	92 - 96 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3		aerobic	50 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Nonylphenol 25154-52-3		aerobic	0 %	ISO 10708 (BODIS-Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:
Cured adhesives are immobile.

Bioaccumulative potential:
No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Diethylenetriamine 111-40-0	-2,13					
4,4'-Isopropylidenediphenol 80-05-7		5,1 - 13,8	42 d	Cyprinus carpio	25 °C	
4,4'-Isopropylidenediphenol 80-05-7	3,4				21,5 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Benzyl alcohol 100-51-6	1,08					
N-(3-(Trimethoxysilyl)propyl)ethyl enediamine 1760-24-3	-1,67					

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB

Diethylenetriamine 111-40-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
m-Phenylenebis(methylamine) 1477-55-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4,4'-Isopropylidenediphenol 80-05-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Benzyl alcohol 100-51-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
N-(3-(Trimethoxysilyl)propyl)ethylenediamine 1760-24-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Nonylphenol 25154-52-3	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.

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	2735
RID	2735
ADNR	2735
IMDG	2735
IATA	2735

14.2. UN proper shipping name

ADR	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
RID	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
ADNR	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (m-Xylylenediamine,Diethylenetriamine)
IATA	Amines, liquid, corrosive, n.o.s. (m-Xylylenediamine,Diethylenetriamine)

14.3. Transport hazard class(es)

ADR	8
RID	8
ADNR	8
IMDG	8
IATA	8

14.4. Packaging group

ADR	II
RID	II
ADNR	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	not applicable
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) < 10,00 %

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:

R20 Harmful by inhalation.
R20/22 Harmful by inhalation and if swallowed.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R34 Causes burns.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52 Harmful to aquatic organisms.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.
R63 Possible risk of harm to the unborn child.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H361f Suspected of damaging fertility.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
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.