RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

1. Identification of the substance/mixture and of the company/ undertaking

Product identifier electrically conductive 1-c paste (base silicone), filler: Ag/Al (Silver/Aluminum)

Trade name : Neusil K183

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

Industrial.

Use of substance / preparation: electrically conductive adhesive.

Details of the supplier of the safety data sheet

Supplier: NEUHAUS ELEKTRONIK GmbH

 Street :
 Drontheimer Str. 21

 Postal code/city :
 D 13359 Berlin

 Telephone :
 +49 (0)30 497-695-0

 Telefax :
 +49 (0)30 497-695-30

Information contact : Telephone : +49 (0)30 497-695-0

Telefax: +49 (0)30 497-695-30

E-Mail: neuhaus-elektronik@t-online.de

Emergency telephone number

Emergency information (german) Mr. Alexander Neuhaus +49 (0)30-497-695-0
Emergency information (international) Mr. Alexander Neuhaus +49 (0)179 4511183

2. Hazards identification

GHS Classification

Classification according to Regulation (EC) No 1272/2008 as amended

Aspiration hazard; Category 1 Toxic to reproduction; Category 2

Specific target organ toxicity - repeated exposure; Category 2

Skin corrosion/irritation; Category 2 Acute toxicity; Category 4; Inhalation Flammable liquids; Category 2

GHS-Labelling Regulation (EC) No. 1272/2008:



Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

Seite 1 / 7

RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

Precautionary Statement - : Take precautionary measures against static discharge. Wear

Prevention : protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement -

Response

: Eliminate all ignition sources if safe to do so. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical

advice/attention

Precautionary Statement -

Response

: Store in a well-ventilated place.

Precautionary Statement -

Disposal

: Dispose of contents/container to an approved incineration plant.

Labelling according to EC Directives

1999/45/EC

Hazardous components which must be listed on the label:

Tolue

Symbol(s) : F Highly Flammable

Xn Harmful

R-phrase(s) : R11 Highly flammable.

R20 Harmful by inhalation.
R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by

prolonged exposure through inhalation

R63 Possible risk of harm to the unborn child.
R65 Harmful: may cause lung damage if swallowed.

S-phrase(s) : S9 Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking.
 Take precautionary measures against static discharges

S36/37 Wear suitable protective clothing and gloves.

S60 This material and its container must be disposed of as hazardous waste

S62 If swallowed, do not induce vomiting: seek

medical advice immediately and show this container or label.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Silicone resin in toluene

Hazardous components

Chemical Name	CAS-No.	EINECS-No.	Symbol(s)	R-	Concentration
		ELINCS No.		phrase(s)	%
Toluene	108-88-3	203-625-9	F, Xn	R11, R38,	>= 25,000 - <
				R48/20,	50,000
				R63, R65,	
				R67	
Octamethylcyclotetrasiloxane	556-67-2	209-136-7	Xn	R53, R62	>= 1,000 - <
					5,000



RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

Hazardous components Regulation (EC) No. 1272/2008

Chemical Name	CAS-No	EINECS-	Hazard classification	Concentration
		No.	Hazard statements	%
		ELINCS No.		
Toluene	108-88-3	203-625-9 Category 2 Flammable		>= 25,000 - <
			liquids H225.	50,000
			Category 2 Toxic for	
			Reproduction H360Df.	
			Category 1 Aspiration	
			hazard H304.	
			Category 2 Specific	
			target organ toxicity -	
			repeated exposure	
			H371.	
			Category 2 Skin	
			corrosion/irritation H319	
			Category 3 Specific	
			target organ toxicity -	
			single exposure H331.	
Octamethylcyclotetrasiloxane	556-67-2	209-136-7	Category 2 Toxic for	>= 1,000 - <
			Reproduction H361f.	5,000
			Category 4 Chronic	
			hazards to the aquatic	
			environment H413.	
			Category 3 Flammable	
			liquids H226.	

4. FIRST AID MEASURES

Inhalation : Move person to fresh air, keep warm, keep at rest. Artificial

respiration and/or oxygen may be necessary. Obtain medical attention.

Skin contact : Take off all contaminated clothing immediately. Wash off with

soap and water. Wash contaminated clothing before reuse.

Obtain medical attention.

Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion : Do NOT induce vomiting. Rinse mouth. Drink 1 or 2 glasses of water. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam. Carbon dioxide (CO2) Dry chemical

Further Information : Use water spray to cool unopened containers

Special protective : Wear self contained breathing apparatus for fire fighting if

equipment for fire-fighters necessary.

6. ACCIDENT

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. Keep people away from and

upwind of spill/leak. Ensure adequate ventilation.

Methods for cleaning up : Remove all sources of ignition. Take up with an absorbent for

chemicals or, otherwise use dry sand. Shovel into suitable

container for disposal.

RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Take measures to prevent the build up of electrostatic charge.

Avoid contact with eyes, skin, and clothing. Wear personal protective equipment. Do not breathe vapours or spray mist.

Advice on protection against fire and explosion

: Keep away from sources of ignition - No smoking.

Storage

Requirements for storage areas and containers

: Keep containers tightly closed in a dry, cool and well-ventilated

place.

Other data : Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	
Toluene	108-88-3	Basis: EH40 OES; Update: 2003; Time Weighted Average (TWA): 50 ppm	
		Basis: EH40 OES; Update: 2003; Short Term Exposure Limit (STEL): 150 ppm	
		Basis: EH40 OES; Update: 2003; Skin designation: ;	
		Can be absorbed through the skin.	
		Basis: EH40 WEL; Update: 2005; Time Weighted Average (TWA): 50 ppm	
		Basis: EH40 WEL; Update: 2007; Short Term Exposure Limit	
		(STEL): 100 ppm	
		Basis: EH40 WEL; Update: 2005; Skin designation:	
		Can be absorbed through the skin.	
		Basis: EU ELV; Update: 02 2006; Skin designation:	
		Can be absorbed through the skin.	
		Basis: EU ELV; Update: 02 2006; Listed.	

Engineering measures

Use only in an area equipped with a safety shower.

Eye wash bottle with pure water.

Personal protective equipment

Respiratory protection : Respirator with a vapour filter (EN 141)

Respiratory protection mask with Filtertype ABEK

Hand protection : Advise: Short time contact:Material: Nitrile rubberMinimum

break through time: 25 minGlove thickness: $0.35 \ \text{mm}$

Hand protection : Advise: Prolonged contact :Material: Gloves made of

Viton.Minimum break through time: > 480 minGlove thickness:

0,4 mm

Eye protection : Safety glasses with side-shields conforming to EN166

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Seite 4 / 7

RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : viscous

Colour : gray

Odour : Aromatic

Safety data

Melting point : Melting point/range

No data available

Boiling point/boiling range : 111 °C at 1,013 hPa

Method: No data available.

Flash point ca.1,6 °C Method: Tagliabue Closed Cup

Autoignition temperature : ca.536 °C

Lower explosion limit : ca.1,2 %(V)

Method: No data available.

Upper explosion limit ca.7,0 %(V)

Vapour pres : ca.22 hPa

at 20 °C Method: EU A4

Density : 1,28 g/cm³

Thermal decomposition : Note: Stable under recommended storage conditions.

Miscibility with water : immiscible

10. STABILITY AND REACTIVITY

Further information : Apply the following regulations and datasheets of the German

BG Chemie M 017 "Solvent".

M 050 "Handling harmful substances".

M 053 "General industrial protective measures for handling

dangerous substances".

No dangerous reaction if used as recommended.

11. TOXICOLOGICAL INFORMATION

Human experience : A two year combined chronic / carcinogenicity study was

conducted on Octamethylcyclotetrasiloxane with inhalative exposure. At the highest test concentration of 700 ppm an increase of uterine adenomes (benign tumors) was observed in some of the female rats, no effects were observed in male rats. The test concentration of 700 ppm greatly exceeds typical workplace exposure (industry proposed exposure limit: 10 ppm).

Seite 5 / 7

RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

12. ECOLOGICAL INFORMATION

Additional ecological

: Ecotoxicological data for this product is not available. information

13. DISPOSAL CONSIDERATIONS

Product : Dispose of in accordance with local regulations.

: Dispose of as unused product. Contaminated packaging

14. TRANSPORT INFORMATION

Land transport

ADR:	UN-Number	1866
	Class	3
	Packaging group	II
	Classification Code	F1

Hazard identification No 33 ADR/RID-Labels 3 Proper shipping name **RESIN SOLUTION**

RID: **UN-Number** 1866

Class 3 Packaging group Ш Classification Code F1 Hazard identification No 33 ADR/RID-Labels Proper shipping name **RESIN SOLUTION**

Inland waterway transport

ADNR **UN-Number** 1866

> Class 3 Packaging group Ш Classification Code F1 Hazard identification No 33 ADR/RID-Labels 3 Proper shipping name **RESIN SOLUTION**

Sea transport

IMDG: **UN-Number** 1866

> Class 3 П Packaging group IMDG-Labels 3 EmS F-E, S-E Proper shipping name **RESIN SOLUTION**

Air transport

ICAO/IATA: 1866 **UN-Number**

Class 3 П Packaging group ICAO-Labels 3 Proper shipping name **RESIN SOLUTION**

Further Information : Highly Flammable

Keep away from food, foodstuff, acids and bases.

Seite 6 / 7

RFI shielding specialist

for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K183 Date of revision 15.06.2015

Special provision

ADNR Special Provision 640D

ADR Special Provision 640D

RID Special Provision 640D

15. REGULATORY INFORMATION

Inventories

Australia Inventory of y (positive listing)

Chemical Substances (AICS)

EU list of existing chemical y (positive listing)

substances

Japan Inventory of Existing & y (positive listing)

New Chemical Substances

(ENCS)

China Inventory of Existing y (positive listing)

Chemical Substances

Korea Existing Chemicals y (positive listing)

Inventory (KECI)

Canada DSL Inventory y (positive listing)
Canada NDSL Inventory n (Negative listing
Philippines Inventory of y (positive listing)

Chemicals and Chemical

Substances (PICCS)

TSCA list y (positive listing) On TSCA Inventory

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3 $\,$

R11 Highly flammable R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R53 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.
R65 Harmful: may cause lung damage if swallowed
R67 Vapours may cause drowsiness and dizziness.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Seite 7 / 7