

RFI shielding specialist  
for conductive adhesives and gaskets

## Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K181

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/glass (Silver/glass)  
**Trade name :** Neusil K181

#### 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-Labeling 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.

#### Precautionary statements

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

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- Precautionary Statement - : Take precautionary measures against static discharge. Wear
- Prevention : protective gloves/protective clothing/eye protection/face protection.
- Precautionary Statement - : Eliminate all ignition sources if safe to do so. IF SWALLOWED:  
Response Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention
- Precautionary Statement - : Store in a well-ventilated place.  
Response
- Precautionary Statement - : Dispose of contents/container to an approved incineration plant.  
Disposal

## Labelling according to EC Directives

1999/45/EC

Hazardous components which must be listed on the label:

- Toluene

Symbol(s)	: F Xn	Highly Flammable Harmful
R-phrases(s)	: R11 R20 R38 R48/20 R63 R65	Highly flammable. Harmful by inhalation. Irritating to skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed.
S-phrases(s)	: S9 S16 S33 S36/37 S60 S62	Keep container in a well-ventilated place. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges Wear suitable protective clothing and gloves. This material and its container must be disposed of as hazardous waste 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. ELINCS No.	Symbol(s)	R- phrase(s)	Concentration %
Toluene	108-88-3	203-625-9	F, Xn	R11, R38, R48/20, R63, R65, R67	>= 25,000 - < 50,000
Octamethylcyclotetrasiloxane	556-67-2	209-136-7	Xn	R53, R62	>= 1,000 - < 5,000

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### Hazardous components Regulation (EC) No. 1272/2008

Chemical Name	CAS-No	EINECS-No. ELINCS No.	Hazard classification Hazard statements	Concentration %
Toluene	108-88-3	203-625-9	Category 2 Flammable liquids H225. 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.	$\geq 25,000$ - $< 50,000$
Octamethylcyclotetrasiloxane	556-67-2	209-136-7	Category 2 Toxic for Reproduction H361f. Category 4 Chronic hazards to the aquatic environment H413. Category 3 Flammable liquids H226.	$\geq 1,000$ - $< 5,000$

#### 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 equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting if 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.

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## 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 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form : viscous

Colour : beige

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 : 1,25 g/cm<sup>3</sup>

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 adenomas (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).

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## 12. ECOLOGICAL INFORMATION

Additional ecological information : Ecotoxicological data for this product is not available.

## 13. DISPOSAL CONSIDERATIONS

Product : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

## 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	II
Classification Code	F1
Hazard identification No	33
ADR/RID-Labels	3
Proper shipping name	RESIN SOLUTION

### Inland waterway transport

**ADNR**

UN-Number	1866
Class	3
Packaging group	II
Classification Code	F1
Hazard identification No	33
ADR/RID-Labels	3
Proper shipping name	RESIN SOLUTION

### Sea transport

**IMDG:**

UN-Number	1866
Class	3
Packaging group	II
IMDG-Labels	3
EmS	F-E, S-E
Proper shipping name	RESIN SOLUTION

### Air transport

**ICAO/IATA:**

UN-Number	1866
Class	3
Packaging group	II
ICAO-Labels	3
Proper shipping name	RESIN SOLUTION

**Further Information** : Highly Flammable  
Keep away from food, foodstuff, acids and bases.

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### 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.**