

RFI shielding specialist
for conductive adhesives and gaskets

Safety Data Sheet (1907/2006/EC)

Vers: 6.0 (EN)

Material: Neusil K180

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: nickel (Ni)
Trade name : Neusil K180

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

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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.

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 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.
S16 Keep away from sources of ignition - No smoking.
S33 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

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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	$\geq 25,000 - < 50,000$
Octamethylcyclotetrasiloxane	556-67-2	209-136-7	Xn	R53, R62	$\geq 1,000 - < 5,000$

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.

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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.

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.

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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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : viscous

Colour : black

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 : 1,32 g/cm³

Thermal decomposition : Note: Stable under recommended storage conditions.

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Miscibility with water : immiscible

0. 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.

1. 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).

2. 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.

4. 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

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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.

Special provision

ADNR	Special Provision 640D
ADR	Special Provision 640D
RID	Special Provision 640D

5. REGULATORY INFORMATION

Inventories

Australia Inventory of Chemical Substances (AICS)	y (positive listing)	
EU list of existing chemical substances	y (positive listing)	
Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)	
China Inventory of Existing Chemical Substances	y (positive listing)	
Korea Existing Chemicals Inventory (KECI)	y (positive listing)	
Canada DSL Inventory	y (positive listing)	
Canada NDSL Inventory	n (Negative listing)	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)	
TSCA list	y (positive listing)	On TSCA Inventory

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

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6. 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.