

SAFETY DATA SHEET



Product name: HEAT CONDUCTIVE PASTE
Revision Date: 2013-11-28
Document No.: M0062

Page: 1/8
Print date: 2013-11-28
SDS-ID: US-EN/14.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name: HEAT CONDUCTIVE PASTE
Cat. No. 40300001

Container size: 20 g

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

Application: Conductive paste

Details of the supplier of the safety data sheet

Supplier: Struers A/S
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

Responsible for material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI
Any questions to the contents of this material safety data sheet should be sent to:
Lisbeth.Mygind@struers.dk

Emergency telephone number

Emergency telephone: Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	2/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

The product is classified: N;R50/53

Human health: The hazardous properties of the product are considered to be limited.

Environment: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements



Dangerous
for the
environment

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S57 Use appropriate containment to avoid environmental contamination.

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

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

NFPA Rating: Health:0 Fire:1 Reactivity:0 Other:-

Other hazards

PBT/vPvB: Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: silicon and metal oxides.

67/548/EEC:

%:	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
50-100	1314-13-2	215-222-5	01-2119463881-	Zinc oxide	N;R50-53	

GHS:

%:	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
50-100	1314-13-2	215-222-5	01-2119463881-	Zinc oxide	Aquatic Acute 1;H400 Aquatic Chronic 1;H410	

References: The full text for all R-phrases and hazard statements are displayed in section 16.

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	3/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation: Move into fresh air and keep at rest.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Not known.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Special hazards arising from the substance or mixture

Specific hazards: No specific precautions.

Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes.

Environmental precautions

Environmental precautions: Avoid discharge onto the ground.

Methods and material for containment and cleaning up

Spill Cleanup Methods: Dam and absorb spillage with sand, sawdust or other absorbent.

Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	4/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Avoid inhalation of dust. Observe good chemical hygiene practices.

Technical measures: Work practice should minimize contact.

Technical precautions: Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container.

Specific end use(s)

Specific use(s): Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
1314-13-2	Zinc oxide, respirable fraction	-	2 mg/m3	TWA	-	ACGIH
		-	10 mg/m3	STEL	15min	
1314-13-2	Zinc oxide, total dust	-	15 mg/m3	TWA	-	OSHA
1314-13-2	Zinc oxide, respirable dust	-	5 mg/m3	TWA	-	OSHA
1314-13-2	Zinc oxide, fume	-	5 mg/m3	TWA	-	OSHA

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: During dust-raising work: Use respiratory equipment with particle filter, type P2.

Hand protection: Risk of contact: Wear protective gloves. Nitrile gloves or rubber gloves are recommended.

Eye protection: Risk of splashes: Wear goggles/face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.

SAFETY DATA SHEET

Product name: HEAT CONDUCTIVE PASTE
Revision Date: 2013-11-28
Document No.: M0062

Page: 5/8
Print date: 2013-11-28
SDS-ID: US-EN/14.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: white paste
Odor: Odorless.
pH: Not available.
Boiling point: Not available.
Flash point: >101 °C
Explosion limits: Not available.
Relative density: 2,0
Solubility: insoluble in water
Decomposition temperature (°C): Not available.

Other information

Other data: VOC (Volatile Organic Substances): 0 g/l

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: None known.

Chemical stability

Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions

Hazardous Reactions: None known.

Conditions to avoid

Conditions/materials to avoid: Oxidizing agents.

Incompatible materials

Incompatible materials: None known.

Hazardous decomposition products

Hazardous decomposition products: None in particular.

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	6/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhalation: Not relevant at normal room temperatures.

Skin contact: Prolonged contact may cause redness and irritation.

Eye contact: May irritate.

Ingestion: No harmful effects expected in amounts likely to be ingested by accident.

Specific effects: Risk of long-term effects is expected to be minimal from occupational exposure.

Carcinogenicity:
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Degradability: There are no data on the degradability of this product.

Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: Not relevant.

Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code:16 05 08

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	7/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 14: TRANSPORT INFORMATION

UN number

UN-No: 3077

UN proper shipping name

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

Additional IMDG information:

EmS: F-A, S-F

MFAG: 1

Transport hazard class(es)

Class: 9

Packing group

PG: III

Environmental hazards

Marine pollutant: Yes.

Environmentally Hazardous substance: Yes.

Special precautions for user

Special precautions: None known.

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

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: TSCA: Listed.

National regulation: Europe/USA:
This Material Safety Data Sheet has been prepared according to the EU-regulation.
Threshold Limit Values (2013), ACGIH, by the American Conference on Governmental Industrial Hygienists.
The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

Chemical Safety Assessment

CSA status: Not relevant.

SAFETY DATA SHEET

Product name:	HEAT CONDUCTIVE PASTE	Page:	8/8
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0062	SDS-ID:	US-EN/14.0

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: -

The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Wording of H-statements:

R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
www.dhigroup.com.
