EC360® Diamond Thermal Paste
Safety Datasheet (SDS)

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Revision Date: 01st October 2024

Section 1: Identification of the substance and company undertaking

1.1 Product identifier

Commercial Name: EC360® DIAMOND
Synonyms: Thermal Compound

Product name	Item No	EAN
EC360® DIAMOND 11W/mK Thermal Paste (1g)	EC360T002	0748388847137
EC360® DIAMOND 11W/mK Thermal Paste (4g)	EC360T007	0675834582284
EC360® DIAMOND 11W/mK Thermal Paste (20g)	EC360T004	0748388847434

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

Use of the product: Electrical industry and electronics
Uses advised against: None known

1.3 Details of the supplier of the safety data sheet

Company:
Jaden Technologies GmbH
Augustastr. 19
47198 Duisburg
Germany
Email: sales@extremecool360.com

1.4 Emergency telephone number

English: +49 20664609360

German: +49 20664609360

Section 2: Hazards identification

2.1 Classification of the substance or mixture

CLP classification - Regulation (EC) No. 1272/2008

Health hazards

H302 Harmful if swallowed
H320 Causes eye irritation
H332 Harmful if inhaled

Environmental hazards

H413 May cause long lasting harmful effects to aquatic life

Other

P102 Keep out of reach of children

2.2 Label elements

GHS pictogram:

Signal word:

Danger

Danger warnings:

H302 Harmful if swallowed
H320 Causes eye irritation
H332 Harmful if inhaled
H413: May cause long lasting harmful effects to aquatic life

Safety instructions:

P102 Keep out of reach of children
P273 Avoid release to the environment

2.3 Other hazards

No other hazards are known.

Section 3: Composition / Information on Ingredients

3.1 Mixtures

Description:
Silicone compound

Name	CAS-No	Conc. (% w/w)	Classification
Polydimethylsiloxane	63148-62-9	16	H302 Harmful if swallowed H320 Causes eye irritation H332 Harmful if inhaled H413 May cause long lasting harmful effects to aquatic life P102 Keep out of reach of children
Zinc oxide	1314-13-2	40	
Aluminium oxide	1344-28-1	34	
Silica powder	7440-21-3	10	

CLP classifications are based on all current available data including from known international organizations. These classifications are subject to revision as more information becomes available.

Section 4: First Aid Measures

4.1 Description of first aid measures

Eye contact: Flush eyes with water for 15 minutes.
Get medical attention if symptoms occur.

Skin contact: Wash with water and soap.
Get medical attention if symptoms occur.

Inhalation:	Remove to fresh air. Get medical attention if symptoms occur.
Ingestion:	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. For further information contact Jaden Technologies GmbH.

Section 5: Firefighting Measures

5.1 Extinguishing Media

Extinguishing Media:	Small fires: Water spray, Carbon Dioxide (CO2), Dry Chemical Large fires: Water spray, Alcohol-resistant foam
Unsuitable Media:	None known

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:	Exposure to combustion products may be a hazard to health.
Hazardous combustion products:	Carbon oxides and traces of incompletely burned carbon compounds Silicon dioxide Metal oxides Formaldehyde

5.3 Advice for firefighters

Fire Fighting Instructions:	Use extinguishing measures that are appropriate to local circumstances and surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from the fire area if it is safe to do so. Determine the need to evacuate or isolate the fire area according to your local emergency plan.
Protective Equipment:	Wear self-contained breathing apparatus for firefighting. Use protective clothing.
NFPA Fire:	0
NFPA Health:	1
NFPA Reactivity:	0

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Wear proper protective equipment. Avoid eye contact. Do not swallow.

6.2 Environmental precautions

Environmental Precautions: Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers

6.3 Methods and materials for containment and cleaning up

Methods for Containment:	Scrape up and place in a container fitted with a lid.
Methods for Cleanup:	Clean area as appropriate since spilled materials, even in small quantities, produce a slippery surface. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.

6.4 Reference to other sections

Other Spill Precautions: Determine the applicable laws and regulations for disposal and follow them. For more information on disposal, see section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Handling: General ventilation is recommended. Local ventilation is recommended. Avoid eye contact. Do not swallow. Do not breath. Do not empty into drains.

Hygiene Practices: Wash hands after handling, especially before eating, drinking and smoking.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Do not store with oxidizing agents. Storage temperature: - 25 °C to 50 °C

Unsuitable packaging materials: None known

7.3 Specific end use(s)

See Technical Datasheet, which is available upon request.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters

Name	CAS-No	Exposure Limits

Treated filler	-	Observe zinc oxide limits. OSHA PEL (final rule): TWA 15 mg/m^3 Total dust 5 mg/m^3 respirable fraction. ACGIH TLV: TWA 10 mg/m^3 total dust.

8.2 Exposure Controls

Appropriate engineering controls:

Ventilation: Refer to Section 7.1.

Respiratory protection: Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances if the OEL may be exceeded. Depending on the working conditions, wear a respiratory mask with a filter(s) A or use a self-contained respirator. The choice of filter depends on the amount of chemical being handled in the place of work. Contact your respiratory protection supplier regarding filter characteristics.

Skin Protection: Protective equipment is not normally required.

Eye/face protection: Use safety glasses.

Hygiene Practices: Exercise good industrial hygiene practice. Wash hands after handling, especially before eating, drinking and smoking.

Limitation and monitoring of environmental exposure: See section 6 and section 12.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State: Paste

Colour: Grey

Odour: None

Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range:	Not determined
Flammability:	Flame resistant
Lower explosion limit:	Not determined
Upper explosion limit:	Not determined
Flash point:	> 304 °C (Seta Closed Cup)
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
pH:	Not determined
Kinematic viscosity:	Not determined
Solubility	Not determined
Partition coefficient n-octanol/water (log value):	Not determined
Vapor pressure:	Not determined
Density:	3.2 g/cm^3
Relative vapour density:	Not determined
Evaporation Rate:	Not determined
Percent Volatile:	Not determined
VOC Content:	Not determined
Odor Threshold:	Not determined
Oxidizing Properties:	Not determined
Explosive Properties:	Not determined

9.2 Other information

Appearance: Paste

Section 10: Stability and Reactivity

10.1 Reactivity

Reactivity: None known.

10.2 Chemical stability

Chemical Stability: Stable under recommended handling and storage conditions

10.3 Possibility of hazardous reactions

Hazardous polymerization: Hazardous polymerization will not occur.

10.4 Conditions to avoid

Conditions to Avoid: None known.

10.5 Incompatible materials

Incompatible Materials: Can react with strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous Decomposition:

Section 11: Toxicological Information

Pre-Existing Conditions Aggravated by Exposure: None generally recognized.

Acute Inhalation Effects:	No significant effects expected from a single short-term exposure
Acute Skin Effects:	No significant irritation expected from a single short-term exposure.
Acute Ingestion Effects:	Low ingestion hazard in normal use.
Acute Eye Effects:	Direct contact may cause temporary discomfort

Section 12: Ecological Information

12.1 Toxicity

Ecotoxicity:	Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, due to the physical form and water-insolubility of the product the bioavailability is negligible.
Environmental Stability:	No data available for this product.

12.2 Persistence and degradability

Solid material, insoluble in water. No adverse effects are predicted.

12.3 Bioaccumulative potential

Bioaccumulation:	No data available for this product.

12.4 Mobility in soil

No further information available

12.5 Results of PBT and vPvB assessment

No further information available

12.6 Endocrine disrupting properties

No further information available

12.7 Other adverse effects

No further information available

Section 13: Disposal considerations

13. Waste treatment methods

Product Disposal: This material must be disposed of as hazardous waste

Packaging Disposal: Dispose of in accordance with Local regulations.

According to the European Waste Catalogue, waste codes are application specific and not related to specific products. Waste codes should be assigned by the user, preferably in dialog with the waste disposal authorities.

Section 14: Transport Information

- UN Number: N/A
- UN Proper Shipping Name: Non-Hazardous Heat Sink Compound
- Transport Hazard Class: Non-Hazardous
- Environmental Hazards (Marine Pollutant): No
- Transport in Bulk: Yes
- Special Transport Precautions: N/A
- Not a hazardous material for DOT, TDG classification, ADR/RID, IMDG, and IATA-DGR shipping.

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations / legislation specific for the product

Regulatory – Product None

Based SARA:	
Regulatory – Ingredient Based:	None
Canada DSL:	All ingredients listed or exempt.
IECSC:	All ingredients listed or exempt.
EINECS:	Not determined.
TSCA Inventory Status:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances
AICS:	One or more ingredients are not listed or exempt.

15.1 Chemical Safety Assessment

No chemical safety assessment has been carried out by the supplier for this substance/mixture.

Section 16: Other Information

Disclaimer:

This product and safety datasheet has been created in accordance with Article 31 and Annex II of the EU REACH regulations, as well as their relevant supplements and updates, considering all applicable laws, regulations, and guidelines for the classification, packaging, and labeling of hazardous substances and mixtures.

It is solely the responsibility of the individuals receiving this product safety datasheet to ensure that the information contained therein is read and understood by all persons who use, transport, dispose of, or may come into contact with the product in any way.

If the recipient subsequently creates a mixture containing the EC360 product, it is their sole responsibility to ensure that the transfer of all relevant information from the EC360 product safety datasheet to their own safety datasheets is accurately conducted, in accordance with Article 31 and Annex II of the EU REACH regulations.

All information and instructions in this product safety datasheet (also known as safety data sheet or SDS) are based on the current state of scientific knowledge and the latest technical standards at the time printed on this SDS. Jaden Technologies GmbH cannot be held liable for any defects mentioned in this SDS, provided that the presence of such

defects cannot objectively be determined considering the current scientific and technical capabilities.

As mentioned above, this SDS has been created in accordance with the applicable European laws. If you have purchased this material outside of Europe, where the applicable laws may differ from European laws, please obtain a specific SDS for the country where the product is sold and used from your local EC360 supplier.

Please note that the layout and content of different SDS may vary between countries, even for the same product, as they must comply with the respective applicable legal requirements.

If you have any further questions, please contact your local EC360 supplier.

Source of information: Internal data and publicly available information.