



ARCTIC MX-5

Material Safety Datasheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Date: 1-October-2023

Section 1: Identification of the substance and company undertaking

1.1 Product name

Commercial Name: MX-5 Thermal Compound

Part No.: ACTCP00043A, ACTCP00044A, ACTCP00045A, ACTCP00046A, ACTCP00047A, ACTCP00048A, ACTCP00049A, ACTCP00050A, ACTCP00051A, ACTCP00052A, ACTCP00053A, ACTCP00054A, ACTCP00055A, ACTCP00056A, ACTCP00057A, ACTCP00058A, ACTCP00065A, ACTCP00066A, ACTCP00067A, ACTCP00068A, ACTCP00069A, ACTCP00070A

Synonyms: TIM, Thermal Interface Material, Thermal Compound, CPU Grease

1.2 Relevant identified uses of the substance and uses advised against

Product Restrictions: Not applicable

1.3 Supplier details

Company:

ARCTIC (HK) Ltd.
Unit 1302-05, The Octagon
No.6 Sha Tsui Road
Tsuen Wan, New Territories
Hong Kong
Email address: info@arctic.de

1.4 Emergency telephone number

English Tel: +49 611237507
German Tel: +49 531 60945294

Section 2: Hazards identification

2.1 Emergency overview

Appearance Grease
Odor Not provided
No hazardous substance or mixture

2.2 Classification of the substance or mixture

No hazardous substance or mixture

2.3 Label elements

No hazardous substance or mixture
[Physical and chemical hazards]: No relevant information
[Health hazards]: No relevant information



2.4 Other hazards

No relevant information

Section 3: Composition/information on Ingredients

3.1 Mixtures

Description:

Mixture of the substances listed below with nonhazardous additions.

For the wording of the listed hazard statements refer to section 16.

Name	CAS-No.	Conc. (%)
Aluminum Oxide	1344-28-1	31.5
Magnesium Oxide	1309-48-4	9
Aluminum Powder	7429-90-5	27
Aluminum Nitride	24304-00-5	18
Boron Nitride	10043-11-5	4.5
Polydimethylsiloxane	63148-62-9	10

Section 4: First aid measures

4.1 Description of first aid measures

Eye Contact:	Immediately flush eyes with water for 15 to 20 minutes. Get medical attention if irritation or symptoms of overexposure persist.
Skin Contact:	Immediately wash skin with soap and water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled remove to fresh air. If not breathing give artificial respiration or oxygen by a trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed do not induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Other First Aid:	Exposure to soldering fumes and vapors may be irritation to the eyes, respiratory system and skin.
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4.3 Indication of any immediate medical attention and special treatment needed

Note to Physicians:	none
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Section 5: Fire fighting measures

5.1 Extinguishing media

Extinguishing Media: Foam, carbon dioxide, dry chemical, water fog or spray.

Unsuitable Media: Not determined

5.2 Special hazards arising from the substance or mixture

Unusual Fire Hazards: None known



5.3 Advice for firefighters

Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
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: Do not ingest. Use proper personal protective equipment as listed in Section 8, wear gloves.

6.2 Environmental precautions

Environmental Precautions: Avoid run-off into storm sewers, ditches and waterways

6.3 Methods and materials for containment and cleaning up

Methods for Containment: Collect product and repackage in a container.

Methods for Cleanup: Use common solvents such as mineral spirits, acetone or IPA. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

6.4 Reference to other sections

Other Spill Precautions: See section 13 for disposal information

Section 7: Handling and Storage

7.1 Precautions for safe handling

Handling: Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Store in a cool, dry, well ventilated area away from heat sources, combustible materials and incompatible substances. Keep container tightly closed when not in use.

7.3 Specific end use(s)

Section 8: Exposure Controls, Personal Protection

8.1 Exposure controls

Engineering Controls: Safety Glasses and Gloves are recommended for hygienic practice.

Ventilation: Under normal conditions no special ventilation is needed.

Eye Protection: Safety glasses are not necessary.



Skin Protection: Gloves are not necessary.

Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State:	Paste
Colour:	White, blue or grey
Odor:	Odorless
pH:	Not determined
Melting Temperature:	Not determined
Boiling Temperature:	>400 F / >204 C
Flash Point:	Not determined
Ignition Temperature:	Not determined
Lower Flammable Limit:	Not determined
Upper Flammable Limit:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Solubility:	Insoluble
Specific Gravity:	2.2 – 3.0 (H ₂ O = 1)
Evaporation Rate:	< 0.01 (butyl acetate = 1)
Partition Coefficient:	Not determined
Percent Volatile:	Not determined
VOC Content:	Not determined
Viscosity:	100,000 – 1,500,000 cP@ 1, 10 sec-1 shear @ 25 C
Odor Threshold:	Not determined
Oxidizing Properties:	Not an oxidizer
Explosive Properties:	Not determined

9.2 Other information

Section 10: Stability and Reactivity

10.1 Reactivity:

Reactivity: No data available

10.2 Chemical stability

Chemical Stability: Stable under recommended handling and storage conditions

10.3 Possibility of hazardous polymerization

Hazardous Polymerization: Will not occur

10.4 Conditions to avoid:

Conditions to Avoid: Heat, flames and sparks

10.5 Incompatible materials

Incompatible Materials: Oxidizing agents.



10.6 Hazardous decomposition

Hazardous Decomposition: None known

Section 11: Toxicological Information

11.1 Information on toxicological effects

PreExisting Conditions	None generally recognized.
Aggravated by Exposure:	
Acute Inhalation Effects:	May be harmful if inhaled.
Acute Skin Effects:	May cause skin irritation.
Acute Ingestion Effects:	May be harmful if ingested.
Acute Eye Effects:	May cause eye irritation.
Zinc Oxide Eye Toxicity:	Administration into the eye – Rabbit Standard Draize test: 500mg/24H [Mild] (RTECS)

Section 12: Ecological Information

12.1 Ecotoxicity effects

Ecotoxicity:	No data available for this product.
Environmental Stability:	No data available for this product.

12.2 Bioaccumulative potential

Bioaccumulation:	No data available for this product.
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12.3 Mobility in soil

Mobility in environmental Media:	No data available for this product.
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Section 13: Disposal Information

13.1 Waste treatment methods

Waste Disposal:	Dispose of in accordance with Local, State, Federal and Provincial regulations
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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 substance

Regulatory – Product Based SARA: Listed, Zinc Compounds

Regulatory – Ingredient Based:

Zinc Oxide:

Canada DSL: Listed

TSCA Inventory Status: Listed

EC Number: 215-222-5

Section 16: Other Information

Revision Date: January 15, 2020

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