

Reviewed Date: 2025-08-06

Revision No.: R02

Section 1: Identification of the Substance/Mixture and of the Company**1.1 Product identifier****Commercial Name:** ARCTIC MX-6 Thermal Compound rev 3 and rev 4**UFI:** OE50-208D-N00E-HCPJ**Part No. / UPC / EAN:** ACTCP00079A/84003340172-2

ACTCP00080A/84003340173-9

ACTCP00081A/84003340174-6

ACTCP00084A/84003340175-3

1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the substance or mixture:** Thermal interface material for Electrical industry and electronics**Uses advised against:** None known**1.3 Details of the supplier of the safety data sheet****Company:**

ARCTIC (HK) Ltd.

Unit 3001-07, The Octagon

No.6 Sha Tsui Road

Tsuen Wan,

New Territories

Hong Kong

Email address: info@arctic.de

1.4 Emergency telephone numberFor emergencies, refer to this link for the contact details: <https://support.arctic.de/emergency>**Section 2: Hazards Identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008.**

The product is not classified according to the CLP regulation.

Information concerning particular hazards for human and environment:

The product has not to be labelled due to the calculation procedure of Regulation (EC) No. 1272/2008.

Classification system:

The classification is according to the latest edition of EU Regulation (EC) No. 1272/2008 and extended by company and literature data.

2.2 Label elements**Labelling according to Regulation (EC) No. 1272/2008:** Not applicable

Hazard pictograms: Not applicable

Signal word: Not applicable

Hazard-determining components of labelling: Not applicable

Hazard statements: Not applicable

Precautionary statements: Not applicable

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Determination of endocrine-disrupting properties: Not applicable

Section 3: Composition/Information on Ingredients

3.2 Mixtures hazards

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.	EINECS/ ELINCS No	Conc. (% w/w)
Aluminum <i>Substance with a Union workplace exposure limit</i>	7429-90-5	231-072-3	79.3%
Aluminium oxide <i>Substance with a Union workplace exposure limit</i>	1344-28-1	215-691-6	13.9%
Polydimethylsiloxane	63148-62-9		6.5%
Melanins	8049-97-6		0.3%

Section 4: First Aid Measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally, the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed:

No further relevant information is available.

4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information is available.

Section 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture:

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Not required.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

For the general occupational hygienic measures refer to Section 8.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: None.

7.3 Specific end use(s):

No further relevant information apart from the uses mentioned in Section 1.2.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 7429-90-5 Aluminum (79.3%)	
AGW (Germany)	Long-term value: $1.25 \cdot 10^{**} \text{ mg/m}^3$ 2(II);*alveolengängig**einatembare; AGS, DFG, Y
VLEP (France)	Long-term value: $5 \cdot 10^{**} \text{ mg/m}^3$ *pulvérulent **métal
OEL (Ireland)	Long-term value: $1 \cdot \text{mg/m}^3$ *metal, respirable fraction

CAS: 1344-28-1 Aluminum oxide(13.9%)	
AGW (Germany)	Long-term value: 1.25* 10** mg/m ³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y
VLEP (France)	Long-term value: 10 mg/m ³ *pulvérulent **métal
OEL (Ireland)	Long-term value: 10*4** mg/m ³ *total inhalable** respirable dust

Regulatory information:

AGW (Germany): TRGS 900

VLEP (France): ED 1487 05.2021

OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work

DNELs: Not available. A chemical safety assessment has not been conducted for this mixture and DNELs are not required under current REACH obligations

PNECs: Not available. A chemical safety assessment has not been conducted for this mixture and PNECs are not required under current REACH obligations.

Ingredients with biological limit values:	
CAS: 7429-90-5 Aluminum	
BGW (Germany)	50 µg/g Kreatinin Untersuchungsmaterial: Urin Probennahmezeitpunkt: bei Langzeitexposition: am Schichtende nach mehreren vorangegangenen Schichten Parameter: Aluminium

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Based on the composition shown in Section 3, the following measures are suggested for occupational safety measures.

Appropriate engineering controls:

Wash hands before breaks and at the end of work.

See Section 7 for information about design of technical facilities.

Individual protection measures, such as personal protective equipment

Respiratory protection: Not required.

Hand protection:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration time rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection: Goggles recommended during refilling.

Body protection: Protective work clothing.

Thermal hazards: Not required for normal conditions of use.

Environmental exposure controls: No specific control measures are required for the safe use of this product. Product can be disposed of in the general waste

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

PROPERTY	VALUE
Physical state	Paste
Colour	Grey
Odour	Odorless
Odour threshold	Not determined
Melting point / Freezing point	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Non-flammable
Lower and upper explosion limit	Non-explosive
Flash point	> 200°C
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
pH	Not determined
Viscosity	37,400 poise
Solubility(ies)	Insoluble in water
Vapour pressure	Not applicable
Density	2.8 g/cm ³
Relative vapour density	Not Applicable
Particle characteristics	Not determined

9.2 Other information

No further relevant information available.

Section 10: Stability and Reactivity

- 10.1 Reactivity:** No further relevant information available.
- 10.2 Chemical stability:** No further relevant information available.
- 10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- 10.4 Conditions to avoid:** No further relevant information available.
- 10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:** No dangerous decomposition products known.

Section 11: Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification: Not available

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties: None of the ingredients is listed.

Other information: No further relevant information available

Section 12: Ecological Information

12.1 Toxicity

Aquatic toxicity: No further relevant information available due to inconclusive data.

12.2 Persistence and degradability: Data inconclusive; no further relevant information available.

12.3 Bioaccumulative potential: Data inconclusive; no further relevant information available.

12.4 Mobility in soil: Data inconclusive; no further relevant information available.

12.5 Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

12.6 Endocrine disrupting properties: The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects: Data inconclusive; no further relevant information available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Section 14: Transport Information

14.1 UN number or ID number ADR/RID/ADN, IMDG, IATA	Not applicable
14.2 UN proper shipping name ADR/RID/ADN, IMDG, IATA	Not applicable
14.3 Transport hazard class(es) ADR/RID/ADN, IMDG, IATA Class Not applicable Label	Not applicable -
14.4 Packing group ADR/RID/ADN, IMDG, IATA	Not applicable
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user: Hazard identification number (Kemler code):	Not applicable -
14.7 Maritime transport in bulk according to IMO instruments	Not applicable
14.8 Transport/Additional information:	Not applicable
UN "Model Regulation":	Not applicable

Section 15: Regulatory Information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I: None of the ingredients is listed.

Seveso category: Not applicable

Qualifying quantity (tonnes) for the application of lower-tier requirements: Not applicable

Qualifying quantity (tonnes) for the application of upper-tier requirements: Not applicable

▪ **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

▪ Regulation (EU) No 649/2012
None of the ingredients is listed.

REGULATION (EU) 2019/1148

▪ Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.

▪ Annex II - REPORTABLE EXPLOSIVES PRECURSORS
7429-90-5 Aluminum

▪ Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.

▪ Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

▪ REGULATION (EC) No 1005/2009 on substances that deplete the ozone layer – ANNEX I (Ozone-depleting potential)
None of the ingredients is listed.

Other regulations, limitations and prohibitive regulations

▪ SVHC Candidate List of REACH Regulation Annex XIV Authorisation (14/6/2023)
None of the ingredients is listed.

▪ REACH Regulation Annex XVII Restriction (8/6/2023) See Section 16 for information about restriction of use.
None of the ingredients is listed.

▪ REACH Regulation Annex XIV Authorisation List (8/4/2022)
None of the ingredients is listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out for this mixture as it is not required under REACH obligations.

Section 16: Other Information

Recommended restriction of use: Not applicable

Indication of changes:

R01: Creation – 2024-04-11

R02: General update – 2025-08-06

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2020/878.

DISCLAIMER OF LIABILITY

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Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative