

ARCTIC MX-6 Material Safety Datasheet

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

Date: 1-October-2023

Section 1: Identification of the Substance/Mixture and of the Company

1.1 Product identifier

Commercial name: ARCTIC MX-6 Thermal Compound

Part No./UPC: 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

UFI code: DA50-J0K0-A00X-U13G

Use of the substance or mixture: 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 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

German Tel:+49 531 60945294

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

Hazard pictograms

Signal word

Not applicable

Not applicable

Not applicable



Hazard-determining components of labellingNot applicableHazard statementsNot applicablePrecautionary statementsNot 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

3.1 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) |
|--------------------------------------------------------------------------------------------------------------------------|------------|------------------|---------------|
| Aluminium Substance with a Union workplace exposure limit | 7429-90-5 | 231-072-3 | 81.4% |
| Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol mono-Me ether | 67762-85-0 | - | 18.5% |
| Silver Oxide Ox. Sol. 2, H272; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | 11113-88-5 | - | 0.1% |

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 available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5: Firefghting 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 materials 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 measures required. **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

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 (81.4%) | | |
| AGW (Germany) | Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y | |
| VLEP (France) | Long-term value: 5* 10** mg/m³ *pulvérulent **métal | |
| OEL (Ireland) | Long-term value: 1* mg/m³ *metal, respirable fraction | |



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 **PNECs:** Not available

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 measure.

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 times,

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 can not be calculated in advance and has therefore to be

checked prior to the application.

Penetration time of glove material: The exact break through 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: Control measures must be made in accordance with community

environmental protection legislation.



Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state:PasteColour:GreyOdour:OdorlessOdour threshold:Not availableMelting point/Freezing point:Not available

Boiling point or initial boiling point and boiling range: Not available **Flammability:** Not available

Lower and upper explosion limit

Lower:Not availableUpper:Not availableFlash point:Not availableAuto-ignition temperature:Not availableDecomposition temperature:Not availablepH:Not available

Viscosity

Kinematic viscosity:Not availableDynamic viscosity:Not available

Solubility

Water: Not available
Partition coefficient n-octanol/water (log value): Not available
Vapour pressure: Not available

Density and/or relative density

Density:Not availableRelative density:Not availableRelative vapour density:Not availableParticle characteristics:Not available

9.2 Other information

Appearance

Form: Paste

9.3 Information with regard to physical hazard classes

Explosives: Not available Flammable gases: Not available Aerosols: Not available Oxidising gases: Not available Gases under pressure: Not available Flammable liquids: Not available Flammable solids: Not available Self-reactive substances and mixtures: Not available **Pyrophoric liquids:** Not available **Pyrophoric solids:** Not available Self-heating substances and mixtures: Not available



Substances and mixtures, which emit flammable gases in contact with water:Not applicableOxidising liquids:Not applicableOxidising solids:Not applicableOrganic peroxides:Not applicableCorrosive to metals:Not applicableDesensitised explosives:Not applicableOther safety characteristics:Not 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

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:

Carcinogenicity:

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

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.

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

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

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.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

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

No further relevant information available.

Section 13: Disposal Considerations

13.1 Other adverse effects

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 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: | Not applicable |
| Hazard identification number (Kemler code): | - |



| 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

Seveso category

Qualifying quantity (tonnes) for the application of lower-tier requirements

Qualifying quantity (tonnes) for the application of upper-tier requirements

None of the ingredients is listed.

Not applicable

Not applicable 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 ursors (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 (Ozonedepleting 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.



Section 16: Other Information

Recommended restriction of use

Not applicable

Relevant hazard statements

H272 May intensify fire; oxidiser.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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

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The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reason, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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)

Lethal concentration. 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, bioaccumulative and toxic vPvB: Very persistent and very bioaccumulative

Ox. Sol. 2: Oxidizing solids – category 2

Skin Irrit. 2: Skin corrosion/irritation – category 2

Eye Irrit. 2: Serious eye damage/eye irritation – category 2

STOT SE 3: Specific target organ toxicity (single exposure) – category 3