



SAFETY DATA SHEET

Revision date 16-July-2020

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

Product Identifier

CAS No. 12039-90-6
Product Name Zirconium silicide
Molecular Formula $ZrSi_2$

Details of the supplier

Company name Hunan Huawei Jingcheng Material Technology Co., Ltd.
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Emergency telephone number

0086-731-85124338

Section 2: HAZARDS IDENTIFICATION

The substance is not classified according to the Globally Harmonized System (GHS).

Have cute toxicity, Inhalation Harmful if inhaled.
Skin irritation Causes skin irritation
Eye irritation Causes serious eye irritation
Specific target organ toxicity -May cause respiratory irritation

GHS label elements Labelling according Regulation (EC) No 1272/2008

Hazard pictograms not applicable

Signal word Warning

Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation.
H332 Harmful if inhaled. H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust.

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental hazard: none

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances

CAS No.:12039-90-6

Description:Zirconium disilicide

Section 4: FIRST AID MEASURES

Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: FIRE FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Zirconium oxides, silicon oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

Section 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Combustible Solids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Contains no substances with occupational exposure limit values.

Exposure controls**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

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Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK- P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

- a) Appearance: powder
- b) Odor: no data available
- c) Odor Threshold: no data available
- d) pH: no data available
- e) Melting point: 1620°C
- f) Initial boiling point and boiling range: no data available
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapor pressure: no data available
- l) Vapor density: no data available
- m) Relative density: no data available
- n) Water solubility: insoluble
- o) Partition coefficient - n-octanol/water: no data available
- p) Auto-ignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available
- t) Oxidizing properties: no data available

Other safety information

No data available

Section 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible Conditions	Strong oxidizing agents
Hazardous Decomposition Products	No data available
In the event of fire: see section 5	

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity: no data available

Inhalation: no data available **Dermal:** no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagen city : no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Specific target organ toxicity - repeated exposure: Inhalation - May cause respiratory irritation

Aspiration hazard : no data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No further relevant information available.

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Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14: TRANSPORT INFORMATION

DOT (US)

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Section 15: REGULATORY INFORMATION

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 16: OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

End of Safety Data Sheet



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