

SAFETY DATA SHEET

Revision Date 10-Feb-2015

1. Identification

Product Name Shark Cut-Off Wheels

Cat No.: Zirconium Oxide

Synonyms None.

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Shark Industries 6700 Bleck Drive Rockford, MN 55373

Tel: (800) 537-4275

CHEMTREC Tel. No.US:001-800-424-9300

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation

Category 2

Specific target organ toxicity (single exposure)
Target Organs - Respiratory system.

Category 3

Label Elements

Signal Word Warning

Hazard Statements

Causes serious eye irritation
May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Eves

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

| Component | CAS-No | Weight % | | |
|-----------------|-----------|----------|--|--|
| Zirconium oxide | 1314-23-4 | 100 | | |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Move to fresh air.

Ingestion Do not induce vomiting.

Most important symptoms/effectsNo information available.Notes to PhysicianTreat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point

Method - No information available

Autoignition Temperature 1000 °C

Explosion Limits

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None known

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear.

NFPA

Health Flammability Instability Physical hazards 0 N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions See Section 12 for additional ecological information.

Methods for Containment and Clean No information available.

Up

7. Handling and storage

Handling Ensure adequate ventilation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------|----------------------------|--------------------------------------|----------------------------|
| Zirconium oxide | TWA: 5 mg/m ³ | (Vacated) TWA: 5 mg/m ³ | IDLH: 25 mg/m ³ |
| | STEL: 10 mg/m ³ | (Vacated) STEL: 10 mg/m ³ | TWA: 5 mg/m ³ |
| | | | STEL: 10 mg/m ³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV | | |
|-----------------|----------------------------|----------------------------|----------------------------|--|--|
| Zirconium oxide | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ | | |
| | STEL: 10 mg/m ³ | STEL: 10 mg/m ³ | STEL: 10 mg/m ³ | | |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face ProtectionWear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Powder Solid
Appearance White
Odor Odorless

Odor Threshold No information available

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Melting Point/Range 2700 °C

Boiling Point/Range °C

Flash Point

Evaporation Rate No information available Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data available

Vapor PressureNo information availableVapor DensityNo information available

Relative Density 5.60

Solubility Insoluble in water **Partition coefficient; n-octanol/water** No data available

Autoignition Temperature 1000 °C

Decomposition TemperatureNo information availableViscosityNo information available

Molecular FormulaZrO2Molecular Weight123.2188

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|-----------------|-----------|------------|------------|------------|------------|------------|
| Zirconium oxide | 1314-23-4 | Not listed |

Mutagenic Effects No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard

No information available Symptoms / effects,both acute and No information available

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Endocrine Disruptor Information

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Mobility

Do not empty into drains.

Persistence and Degradability **Bioaccumulation/Accumulation**

No information available No information available.

No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

| DOT | Not regulated |
|----------|---------------|
| TDG | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-----------------|------|-----|------|---------------|--------|-----|-------|-------------|------|-------|------|
| Zirconium oxide | Χ | Χ | - | 215-227-2 | 1 | | Χ | Χ | Χ | Χ | Χ |

Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

Not applicable **TSCA 12(b) SARA 313** Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes **Chronic Health Hazard** No

Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLANot applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know

| Component Massachusetts | | New Jersey | Pennsylvania | Illinois | Rhode Island | | |
|-------------------------|---|------------|--------------|----------|--------------|--|--|
| Zirconium oxide | X | - | - | - | X | | |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D2B Toxic materials



16. Other information

Revision Date 10-Feb-2015 Print Date 10-Feb-2015

Revision SummaryThis document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS