

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : Reno ElectroShot™ 1116 SiC
 Product code : 194540

1.2. Recommended use and restrictions on use

Recommended use : Refractory Applications

1.3. Supplier

Reno Refractories, Inc.
 601 Reno Drive
 P.O. Box 201
 Morris, AL 35116 - United States
 T 205-647-0240 - F 205-647-6854
sales@r-ref.com - www.renorefractions.com

1.4. Emergency telephone number

Emergency number : 1-800-262-8200 CHEMTREC

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Carcinogenicity Category H350 May cause cancer
 1B

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
 Hazard statements (GHS US) : H350 - May cause cancer
 Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P405 - Store locked up.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|------------------|----------------------|--------------|-----------------------|
| Silicon carbide | (CAS-No.) 409-21-2 | 12 – 18 | Carc. 1B, H350 |
| Titanium dioxide | (CAS-No.) 13463-67-7 | 1.02 – 2.811 | Carc. 2, H351 |

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS US classification |
|--------------|---------------------|--------|-----------------------|
| Carbon Black | (CAS-No.) 1333-86-4 | ≤ 0.75 | Carc. 2, H351 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly.
- Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Reno ElectroShot™ 1116 SiC | |
|--|--|
| No additional information available | |
| Carbon Black (1333-86-4) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Carbon black |
| ACGIH TWA (mg/m ³) | 3 mg/m ³ (Inhalable fraction) |
| Remark (ACGIH) | TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) |
| Regulatory reference | ACGIH 2020 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Carbon black |
| OSHA PEL (TWA) (mg/m ³) | 3.5 mg/m ³ |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| Titanium dioxide (13463-67-7) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Titanium dioxide |
| ACGIH TWA (mg/m ³) | 10 mg/m ³ |
| Remark (ACGIH) | TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen) |
| Regulatory reference | ACGIH 2020 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Titanium dioxide (Total dust) |
| OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| Silicon carbide (409-21-2) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Silicon carbide |
| ACGIH TWA (mg/m ³) | 3 mg/m ³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 0.1 fibers/cm ³ (Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 10 mg/m ³ (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) |
| Remark (ACGIH) | Non fibrous = TLV® Basis: URT irr Fibrous (including whiskers) = TLV® Basis: Mesothelioma; cancer. Notations: A2 (Suspected Human Carcinogen) |
| Regulatory reference | ACGIH 2020 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Silicon carbide |
| OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction) |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|----------------------|
| Physical state | : Solid |
| Appearance | : Granular powder. |
| Color | : Dark grey to black |
| Odor | : Almost odorless |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : Not applicable |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : Not applicable |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Carbon Black (1333-86-4) | |
|--------------------------|--|
| LD50 oral rat | > 10000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 28 day(s)) |
| LC50 Inhalation - Rat | > 4.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Experimental value, Inhalation (dust)) |

| Titanium dioxide (13463-67-7) | |
|-------------------------------|---|
| LD50 oral rat | > 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral, 14 day(s)) |
| LC50 Inhalation - Rat | > 6.82 mg/l (Other, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s)) |

| Silicon carbide (409-21-2) | |
|----------------------------|--|
| LD50 oral rat | > 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral) |
| LD50 dermal rat | > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal) |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

| Carbon Black (1333-86-4) | |
|--------------------------|--------------------------------------|
| IARC group | 2B - Possibly carcinogenic to humans |

| Titanium dioxide (13463-67-7) | |
|-------------------------------|--------------------------------------|
| IARC group | 2B - Possibly carcinogenic to humans |

| Silicon carbide (409-21-2) | |
|----------------------------|--------------------------------------|
| IARC group | 2A - Probably carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| Carbon Black (1333-86-4) | |
|--------------------------|--|
| LC50 fish 1 | > 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Lethal) |
| EC50 Daphnia 1 | > 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) |

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Carbon Black (1333-86-4) | |
|--------------------------------------|---|
| ErC50 (algae) | > 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration) |
| Titanium dioxide (13463-67-7) | |
| LC50 fish 1 | > 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration) |
| ErC50 (algae) | 61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration) |

12.2. Persistence and degradability

| Carbon Black (1333-86-4) | |
|--------------------------------------|---|
| Persistence and degradability | Biodegradability in soil: not applicable. Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| Titanium dioxide (13463-67-7) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| Silicon carbide (409-21-2) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential

| Carbon Black (1333-86-4) | |
|--------------------------------------|----------------------------------|
| Bioaccumulative potential | Not bioaccumulative. |
| Titanium dioxide (13463-67-7) | |
| Bioaccumulative potential | Not bioaccumulative. |
| Silicon carbide (409-21-2) | |
| Bioaccumulative potential | Bioaccumulation: not applicable. |

12.4. Mobility in soil

| Carbon Black (1333-86-4) | |
|--------------------------------------|--|
| Surface tension | Not applicable (solid) |
| Ecology - soil | No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to animals. |
| Titanium dioxide (13463-67-7) | |
| Ecology - soil | Low potential for mobility in soil. |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Carbon Black (1333-86-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silicon carbide (409-21-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Carbon Black (1333-86-4)

Listed on the Canadian DSL (Domestic Substances List)

Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

Silicon carbide (409-21-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Carbon Black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Silicon carbide (409-21-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

Carbon Black (1333-86-4)

| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
|---|---|---|---|----------------------------------|-------------------------------------|
| Yes | No | No | No | | |

| Component | State or local regulations |
|------------------------------|---|
| Carbon Black(1333-86-4) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |
| Titanium dioxide(13463-67-7) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |
| Silicon carbide(409-21-2) | U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

Reno ElectroShot™ 1116 SiC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 01/15/2021

Full text of H-phrases:

| | |
|------|-----------------------------|
| H350 | May cause cancer |
| H351 | Suspected of causing cancer |

SDS US (GHS HazCom 2012)

The information provided in the 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 guidance for safe handling, use, processing, storage, transportation, disposal and release. Reno Refractories, Inc. makes no warranties, expressed or implied, with respect to such information, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.