

# SAFETY DATA SHEET

### Silicone Carbide Rubber Bonded Abrasive Wheels and Points

### **Section 1. Identification**

**GHS** product identifier

: Silicone Carbide Rubber Bonded Abrasive Wheels and Points

Other means of identification

: All Rubber Wheel Items, Rubber Medium Wheels, Rubber Clasp Polisher Items, Ultra Thin Discs, Veri Thin Discs, Ultra Flex, Separating Discs, Knife Edge Wheels, Mizzy

Regular Heatless Wheels

Product code : Various
Product type : Solid.

Product use : Laboratory use

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Supplier's details : Keystone Industries

616 Hollywood Ave. Cherry Hill, NJ 08002 (856) 663-4700

Emergency telephone number (with hours of operation)

: (800) 535-5053

### Section 2. Hazards identification

**OSHA/HCS status** 

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: CARCINOGENICITY - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 50%

**GHS** label elements

Hazard pictograms



Signal word : Danger

**Hazard statements**: May cause cancer.

**Precautionary statements** 

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Wear protective gloves. Wear eye or face protection.

Wear protective clothing.

Response : IF exposed or concerned: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

: None known.

# Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: All Rubber Wheel Items, Rubber Medium Wheels, Rubber Clasp Polisher Items, Ultra Thin Discs, Veri Thin Discs, Ultra Flex, Separating Discs, Knife Edge Wheels, Mizzy Regular Heatless Wheels

### **CAS** number/other identifiers

**CAS number** : Not applicable.

May contain one or more of the following components in quantities considered hazardous:

Ingredient name	CAS number	EC number	%
silicon carbide	409-21-2	206-991-8	25 - 50
titanium dioxide	13463-67-7	236-675-5	1 - 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

### **Description of necessary first aid measures**

Eye contact : Imme

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

### Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

### **Over-exposure signs/symptoms**

Eye contact : No specific data.

Inhalation : No specific data.

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### Section 4. First aid measures

**Skin contact** : No specific data. Ingestion : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

**Hazardous thermal** decomposition products : No specific fire or explosion hazard.

: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective** equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

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### Section 6. Accidental release measures

### **Small spill**

: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

### Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient name	Exposure limits
silicon carbide	ACGIH TLV (United States, 4/2014).
	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Inhalable
	fraction
	TWA: 0.1 f/cc 8 hours. Form: Respirable
	fibers: length greater than 5 uM; aspect ratio
	equal to or greater than 3:1 as determined by
	the membrane filter method at 400-450X
	magnification (4-mm objective) phase contrast
	illumination.
	TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Respirable
	fraction
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable
	fraction
	TWA: 10 mg/m³ 8 hours. Form: Total dust
	NIOSH REL (United States, 10/2013).
	TWA: 5 mg/m³ 10 hours. Form: Respirable
	fraction
	TWA: 10 mg/m³ 10 hours. Form: Total
	OSHA PEL (United States, 2/2013).
	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable

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# Section 8. Exposure controls/personal protection

	fraction
	TWA: 15 mg/m³ 8 hours. Form: Total dust
titanium dioxide	ACGIH TLV (United States, 4/2014).
	TWA: 10 mg/m <sup>3</sup> 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust
	OSHA PEL (United States, 2/2013).
	TWA: 15 mg/m³ 8 hours. Form: Total dust

# Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

#### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### **Respiratory protection**

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### Section 9. Physical and chemical properties

### **Appearance**

Physical state : Solid.

Color : Various

Odor : Not available.

PH : Not available.

Melting point : Not available.

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# Section 9. Physical and chemical properties

Boiling point : Not available.

Flash point : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure: Not available.Vapor density: Not available.

Relative density : 2 to 4

**Solubility** : Very slightly soluble in the following materials: cold water and hot water.

Solubility in water : Not available.

Partition coefficient: n- : Not available.

octanol/water

Auto-ignition temperature : Not available.

Viscosity : Not available.

# Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products

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

# Section 11. Toxicological information

### Information on toxicological effects

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human		72 hours 300 Micrograms Intermittent	-

#### Classification

Product/ingredient name	OSHA	IARC	NTP
silicon carbide	-	2A	-
titanium dioxide	-	2B	-

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

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### Section 11. Toxicological information

**Ingestion**: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

**Potential immediate** 

effects

: Not available.

Potential delayed effects

: Not available.

**Long term exposure** 

**Potential immediate** 

: Not available.

effects

Potential delayed effects : Not available.

### Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

**Carcinogenicity**: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

Not available.

# **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
titanium dioxide	-	352	low

### **Mobility in soil**

Soil/water partition : Not available. coefficient (Koc)

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### Section 12. Ecological information

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# **Section 14. Transport information**

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

# Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: acrylonitrile Clean Water Act (CWA) 311: acrylonitrile

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### Section 15. Regulatory information

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602

**Class I Substances** 

: Not listed

**Clean Air Act Section 602** 

: Not listed

**Class II Substances** 

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

**DEA List II Chemicals** 

(Essential Chemicals)

: Not listed

### **SARA 302/304**

#### Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
acrylonitrile	0 - 0.1	Yes.	10000	1488	100	14.9

SARA 304 RQ : 200000000 lbs / 90800000 kg

**SARA 311/312** 

Classification : Immediate (acute) health hazard

#### **Composition/information on ingredients**

Name	%	hazard	Sudden release of pressure	Reactive	(acute)	Delayed (chronic) health hazard
silicon carbide titanium dioxide		No. No.		No. No.	No. No.	Yes. Yes.

### State regulations

Massachusetts : The following components are listed: SILICON CARBIDE; Red iron oxide; TITANIUM

DIOXIDE

**New York**: None of the components are listed.

New Jersey : The following components are listed: SILICON CARBIDE; Red iron oxide; TITANIUM

DIOXIDE; TITANIUM OXIDE (TiO2)

Pennsylvania : The following components are listed: SILICON CARBIDE (SIC); Red iron oxide;

TITANIUM OXIDE (TIO2)

#### California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
titanium dioxide	Yes.	No.	No.	No.
acrylonitrile	Yes.	No.	Yes.	No.
1,3-butadiene	Yes.	Yes.	Yes.	No.

Canada inventory

: All components are listed or exempted.

**International regulations** 

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### Section 15. Regulatory information

International lists

: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted. **Korea inventory**: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

**Philippines inventory (PICCS)**: All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted.

**Chemical Weapons Convention List Schedule** 

**I Chemicals** 

**Chemical Weapons** 

**Convention List Schedule** II Chemicals

**Chemical Weapons Convention List Schedule**  : Not listed

: Not listed

**III Chemicals** 

: Not listed

### Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### **History**

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### Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

#### References

: Not available.

✓ Indicates information that has changed from previously issued version.

#### **Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Information contained within this SDS is only to be distributed as required by law.

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