

# SAFETY DATA SHEET

Silicon Carbide (pieces)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification	
Product identifier	
Product name	Silicon Carbide (pieces)
Internal identification	Replaces M-2000-255
CAS number	409-21-2
Recommended use of the che	mical and restrictions on use
Application	Exterior surface coating.
Uses advised against	No specific uses advised against are identified.
Details of the supplier of the sa	afety data sheet
Supplier	Kurt J Lesker Company
Manufacturer	Kurt J Lesker Company 1925 Route 51 Jefferson Hills, PA 15025 +1 412-387-9200
	Kurt J Lesker Company LTD United Kingdom 15-16 Burgess Road Hastings, East Sussex, TN35 4NR England Customer Service: +44 (0) 1424 458100 msds@lesker.com
Emergency telephone number	
Emergency telephone	North America [USA, Canada, Mexico]: 1-866-519-4752 Mainland China: (+86) 4001 2001 74 Europe: {int'l call prefix}-1-760-476-3961 Asia Pacific: {int'l call prefix}-1-760-476-3960 Middle East & Africa: {int'l call prefix}-1-760-476-3959
2. Hazard(s) identification	
Classification of the substance	e or mixture
Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified
Label elements Hazard statements Other hazards	NC Not Classified

This product does not contain any substances classified as PBT or vPvB. Based on available knowledge of this material, it has been determined to be non-hazardous and will not pose a risk to persons or the environment in its provided form. However, any cutting, welding, melting, grinding, or use for deposition will produce dust, fume, or particulates containing component elements of this material. Exposure to these components may present significant health hazards. Note: Fine particulate may be a combustible dust which, when dispersed in air, may present an explosion hazard.

#### 3. Composition/information on ingredients

Mixtures	
Silicon Carbide (pieces)	0 - 100%
CAS number: 409-21-2	
Classification Not Classified	

The Full Text for all Hazard Statements are Displayed in Section 16.

4. First-aid measures	
Description of first aid meas	ures
General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.
Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.
Skin Contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.
Eye contact	Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	Use protective equipment appropriate for surrounding materials.
Most important symptoms a	nd effects, both acute and delayed
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.
Indication of immediate medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.
5. Fire-fighting measures	
Extinguishing media	

### Extinguishing media

Suitable extinguishing media

The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing	Do not use water jet as an extinguisher, as this will spread the fire.
media	
Special hazards arising from the	
Specific hazards	None known.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.
6. Accidental release measure	S
Personal precautions, protective	ve equipment and emergency procedures
Personal precautions	No specific recommendations. For personal protection, see Section 8.
Environmental precautions	
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
Methods and material for conta	ainment and cleaning up
Methods for cleaning up	Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.
Reference to other sections	For personal protection, see Section 8.
7. Handling and storage	
Precautions for safe handling	
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.
Conditions for safe storage, in	cluding any incompatibilities
Storage precautions	No specific recommendations.
Storage class	Unspecified storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
8. Exposure Controls/personal	protection
Control parameters	

Occupational exposure limits

Long-term exposure limit (8-ho Long-term exposure limit (8-ho	
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Long-term exposure limit (8-ho A2	bur TWA): ACGIH 0.1 f/cc fibrous (including whiskers)
Long-term exposure limit (8-ho	our TWA): ACGIH 10 mg/m <sup>3</sup> nonfibrous inhalable fraction
Long-term exposure limit (8-ho	bur TWA): OSHA 5 mg/m <sup>3</sup> respirable fraction
Silicon Carbide (pieces)	
Long-term exposure limit (8-ho	our TWA): OSHA 15 mg/m³ total dust
Long-term exposure limit (8-ho	our TWA): ACGIH 3 mg/m <sup>3</sup> nonfibrous respirable fraction
Long-term exposure limit (8-ho A2	our TWA): ACGIH 0.1 f/cc fibrous (including whiskers)
Long-term exposure limit (8-ho	our TWA): ACGIH 10 mg/m <sup>3</sup> nonfibrous inhalable fraction
Long-term exposure limit (8-ho	bur TWA): OSHA 5 mg/m <sup>3</sup> respirable fraction
OSHA = Occupational Safety a ACGIH = American Conferenc A2 = Suspected Human Carcin	e of Governmental Industrial Hygienists.
Exposure controls	
Appropriate engineering controls	No specific ventilation requirements.
Eye/face protection	No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is
	possible.
Hand protection	No specific hand protection recommended. Large Spillages: Wear protective gloves.
Hygiene measures	Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

### 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Appearance	Solid.
Color	Grey.
Odor	No characteristic odor.
Odor threshold	Not applicable.
pН	Not applicable.
Melting point	2730°C
Initial boiling point and range	Not available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	3.21 @ 25°C
Bulk density	Not available.
Solubility(ies)	.01 g/l water @ 20°C Insoluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not available.
Viscosity	Not applicable.
Molecular weight	40.1
10. Stability and reactivity	
Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
11. Toxicological information	
Information on toxicological ef	fects
Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral Notes (oral LD₅o)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC∞)	Based on available data the classification criteria are not met.
Skin corrosion/irritation Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitization Respiratory sensitization	Based on available data the classification criteria are not met.

Skin sensitization	
Skin sensitization	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity -	Based on available data the classification criteria are not met.
development	
Specific target organ toxicity -	single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicity -	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Not relevant. Solid.
General information	No specific health hazards known. The severity of the symptoms described will vary
	dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin Contact	Prolonged contact may cause dryness of the skin.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
12. Ecological Information	
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
Toxicity	
Toxicity	Based on available data the classification criteria are not met.
Persistence and degradability	
Persistence and degradability	The degradability of the product is not known.
Bioaccumulative potential	
Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not applicable.
Mobility in soil	
Mobility	No data available.

#### Other adverse effects

Other adverse effects	None known.
13. Disposal considerations	
Waste treatment methods	
General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.
14. Transport information	
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).
UN Number	
Not applicable.	
UN proper shipping name	
Not applicable.	
Transport hazard class(es)	
No transport warning sign requ	uired.
Packing group	
Not applicable.	
Environmental hazards	
Environmentally Hazardous So No.	ubstance
Special precautions for user	
Not applicable.	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
15. Regulatory information	

### **US Federal Regulations**

### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities None of the ingredients are listed or exempt.

### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA) None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities None of the ingredients are listed or exempt.

#### SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

### CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

#### FDA - Essential Chemical

None of the ingredients are listed or exempt.

**FDA - Precursor Chemical** None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories None of the ingredients are listed or exempt.

### OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

#### **US State Regulations**

California Proposition 65 Carcinogens and Reproductive Toxins None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I) None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-II) None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List None of the ingredients are listed or exempt.

## Rhode Island "Right To Know" List

None of the ingredients are listed or exempt.

### Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

New Jersey "Right To Know" List None of the ingredients are listed or exempt.

Pennsylvania "Right To Know" List None of the ingredients are listed or exempt.

#### Inventories

US - TSCA None of the ingredients are listed or exempt.

# US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

### Philippines - PICCS

All the ingredients are listed or exempt.

#### New Zealand - NZIOC

All the ingredients are listed or exempt.

16. Other information	
Training advice	Only trained personnel should use this material.
Revision date	3/20/2017
Revision	2
Supersedes date	12/3/2015
SDS No.	4701
End of SDS	

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.