SAFETY DATA SHEET
according to Annex II of Regulation (EC) 1907/2006 (REACH)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name: SILICONE RUBBER VULCANIZABLE AT 180 °C
Chemical type: mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against
Molten metal poured into the centrifuge.

1.3. Details of the supplier of the safety data sheet

Company CONLEY CASTING SUPPLY
Address 124 Maples St., Warwick, Rhode Island, 02888
Telephone 401-785-9500
Fax 401-7819420
E-mail sales@conleycasting.com

1.4. Emergency telephone number
Please contact your local Poison Control Centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Specific target organ toxicity — Repeated exposure, Hazard Category 2; H373

The product is classified as hazardous according to calculation methods provided by Regulation (EC) 1272/2008 (CLP), in realtion to the content of Quartz (50 - 55%). However, since this substance is incorporated in the polymer matrix, exposure to the product is not expected to result in hazards to human health, under recommended conditions of use and storage.

2.2. Label elements
Mixtures containing elastomers do not require a label, if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous [Regulation (EC) 1272/2008 (CLP) - Annex I, point 1.3.4.1.].

Contains Quartz.

2.3. Other hazards
Physical and chemical
The product is combustible.

For human health:

Contact with the eyes:	May cause mild and transient mechanical irritation.
Contact with the skin:	In susceptible individuals, repeated and/or prolonged exposure may cause mild irritation or rash.
Inhalation:	Route of exposure not reasonably predictable at room temperature. Vapours can be emitted at high temperatures and may cause respiratory irritation.
Ingestion:	Route of exposure not reasonably predictable. However, the product does not pose risks for acute and/or systemic toxicity.

For the environment:
Product constituents do not satisfy the criteria for PBT or vPvB classification according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC name	EC no	INDEX no	CAS no	Registration no	CLP classification	% w/w
Quartz (SiO2)	238-878-4	-	14808-60-7	exempted (art. 2.7.b - Annex V)	STOT RE 2; H373i	50 - 55
Octamethylcyclotetrasiloxane	209-136-7	014-018-00-1	556-67-2	01-2119529238-36	Flam. Liq. 3; H226	0.1 - 1

					Repr. 2: H361f Aquatic Chronic 4: H413	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Get medical advice if discomfort or doubt occur. The first responders must always use appropriate personal protective equipment (see SECTION 8.2).

Contact with the eyes: Rinse cautiously with water for several minutes, holding the eyelids open. If irritation persists, get medical advice.

Contact with the skin: Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation persists or rash occurs, get medical advice.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, give oxygen and call immediately a doctor. If the victim is not breathing, get a specialised person to apply artificial respiration.

Ingestion: Rinse mouth with water. Do not induce vomiting. If you feel unwell, call mmediately call a POISON CENTER.

4.2. Most important symptoms and effects, both acute and delayed

Contact with the eyes: May cause mild and transient mechanical irritation.

Contact with the skin: In susceptible individuals, repeated and/or prolonged exposure may cause mild irritation or rash.

Inhalation: Route of exposure not reasonably predictable at room temperature. Vapours can be emitted at high temperatures and may cause respiratory irritation.

Ingestion: Route of exposure not reasonably predictable. However, the product does not pose risks for acute and/or systemic toxicity.

4.3. Indication of any immediate medical attention and special treatment needed

For indication of any immediate medical attention, see SECTION 4.1. Basic first aid and symptomatic treatment.

SECTION 5: Firedighting measures

5.1. Extinguishing media

Suitable: Extinguishing media appropriate to the source of the fire and the surrounding area (eg. carbon dioxide, dry chemical powder and foam).

Non suitable: Water.

5.2. Special hazards arising from the substance or mixture

The product is combustible. In case of fire, carbon oxides, silicon oxides, chlorine compounds and other irritating and/or toxic gases/vapours may be emitted.

5.3. Advice for firefighters

Operate in accordance with the provisions of the fire control plan. Evacuate and isolate the area until complete fire extinction, by limiting access only to trained personnel. Firefighters must always wear appropriate protective equipment: positive pressure self-contained breathing apparatus [ref. EN 137]; fireproof clothing [ref. EN 469]; fireproof gloves [ref. EN 659]; firefighter's boots [ref. HO A29-A30]. Ensure adequate ventilation. Avoid breathing gases/vapours and contact with eyes, skin and clothing. Stay upwind. Remove containers if it can be done without risk. Alternatively, cool the recipient exposed to fire with water spray. Prevent the contaminated extinguishing water flowing into drains or waterways.

SECTION 6: Accidental release meausres

6.1. Personal precautions, protective equipment, and procedures in case of emergency

For non-emergency personnel: Operate in accordance with the provisions of the emergency plan. Alert the emergency personnel. Ensure adequate ventilation. Avoid breathing vapours and contact with eyes and skin. If necessary, wear appropriate personal protective equipment (see SECTION 8.2).

For emergency responders: Operate in accordance with the provisions of the emergency plan. Evacuate and isolate the area until complete dispersion of the substance. Ensure adequate ventilation. Avoid breathing vapours and contact with eyes and skin. Wear appropriate personal protective equipment (see

SECTION 8.2).

6.2. Environmental precautions
The product, in the form in which it is placed on the market and on the basis of its chemical-physical characteristics, does not pose risks for the environment.

6.3. Methods and material for containment and cleaning up
Collect with mechanical means and transfer in a properly labeled container. Dispose of in accordance with local and national legislation.

6.4. Reference to other sections
For information on personal protection see SECTION 8. For information on disposal considerations, see SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
The work place and work methods shall be organized in such a way that direct contact with the product is prevented or minimized. Ensure adequate ventilation. Avoid breathing vapours and contact with eyes and skin. Wear appropriate personal protective equipment (see SECTION 8.2). Do not eat, drink, or smoke during use. Wash periodically clothes and personal protective equipment to remove contaminants.

7.2. Conditions for safe storage, including any incompatibilities
Keep only in the original container, tightly closed. Store in a cool, dry and well ventilated place. Avoid exposure to moisture and direct sunlight. Avoid the accumulation of static charges. Keep away from heat/sparks/open flames. Store away from incompatible materials (see SECTION 10.5).

7.3. Specific end use(s)
See SECTION 1.2.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Quartz alfa (respirable fraction)	SCOEL OEL - 8 hours	= 0.05 mg/m^3
	ACGIH TLV - TWA	= 0.025 mg/m^3
Octamethylcyclotetrasiloxane	DNEL worker - acute exposure - inhalation - systemic effects	= 73 mg/m^3
	DNEL worker - acute exposure - inhalation - local effects	= 73 mg/m^3
	DNEL worker - long term exposure - inhalation - systemic effects	= 73 mg/m^3
	DNEL worker - long term exposure - inhalation - local effects	= 73 mg/m^3
	DNEL consumer - acute exposure - inhalation - systemic effects	= 13 mg/m^3
	DNEL consumer - long term exposure - inhalation - local effects	= 13 mg/m^3
	DNEL consumer - acute exposure - inhalation - systemic effects	= 13 mg/m^3
	DNEL consumer - long term exposure - inhalation - local effects	= 13 mg/m^3
	DNEL consumer - acute exposure - ingestione - systemic effects	= 3.7 mg/kg bw/day
	DNEL consumer - long term exposure - ingestione - systemic effects	= 3.7 mg/kg bw/day
	PNEC fresh water	= 0.00044 mg/l
	PNEC marine water	= 0.000044 mg/l
	PNEC sewage treatment plant	> 10 mg/l
	PNEC sediment (fresh water)	= 0.128 mg/kg
	PNEC sediment (marine water)	= 0.013 mg/kg
	PNEC soil	= 0.136 mg/kg

8.2. Exposure controls
Wear personal protective equipment in accordance with standards set by European and national legislation. Consult the supplier in all cases before making a final decision.

Skin protection:	Wear protective clothing with long sleeves.
Hand protection:	Wear impervious gloves made of nitrile rubber (thickness ≥ 0.4 mm ; permeation time > 480

	minutes) or equivalent material [ref. EN 374]. However, since the product is a mixture of several substances, the resistance of the glove material should be tested before use, as it is not predictable in advance. Replace gloves immediately in case of contamination or breakage.
Eye protection:	Wear appropriate safety glasses with side shields [ref. EN 166].
Respiratory protection:	Not required under recommended conditions of use. In case of inadequate ventilation or risk of inhalation of vapours, wear a respirator appropriate to the specific conditions of the workplace.
Technical and hygienic measures:	Provide local exhaust ventilation suction or other devices to maintain the levels of particles in the air below the recommended exposure limits. Equip with emergency showers and eyewash device the areas in which handling and storage of the product takes place. Do not eat, drink, or smoke during use. Wash periodically clothes and personal protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practices.
Environmental measures:	The product, in the form in which it is placed on the market and on the basis of its chemical-physical characteristics, does not pose risks for the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance:	pasty solid (various colors)
b) Odour:	characteristic
c) Odour threshold:	no test available
d) pH:	not applicable (insoluble solid)
e) Melting/freezing point:	no test available
f) Initial boiling point and boiling range:	not relevant (solid)
g) Flash point:	> 800 °C
h) Evaporation rate:	not relevant (solid)
i) Flammability (solid, gas):	not flammable
j) Upper/lower flammability or explosive limits:	no test available
k) Vapour pressure:	not relevant (solid)
l) Vapour density:	not relevant (solid)
m) Relative density:	ca. 1.500 g/cm ^{3}
n) Solubility:	insoluble in water
o) Partition coefficient: n-octanol/water:	no test available
p) Auto-ignition temperature:	not self-igniting
q) Decomposition temperature:	no test available
r) Viscosity:	no test available
s) Explosive properties:	not explosive
t) Oxidising properties:	non-oxidizing

9.2. Other information

Not available.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

The substance is not reactive at room temperature.

10.2. Chemical stability

The substance is stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions are not expected under recommended conditions of use and storage.

10.4. Conditions to avoid

Avoid exposure to moisture and direct sunlight. Avoid the accumulation of static charges. Keep away from heat/sparks/open flames. Store away from incompatible materials (see SECTION 10.5).

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
In case of thermal decomposition, carbon oxides, silicon oxides, chlorine compounds and other irritating and/or toxic gases/vapours may be emitted.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Contact with the eyes:	May cause mild and transient mechanical irritation.
Contact with the skin:	In susceptible individuals, repeated and/or prolonged exposure may cause mild irritation or rash.
Inhalation:	Route of exposure not reasonably predictable at room temperature. Vapours can be emitted at high temperatures and may cause respiratory irritation.
Ingestion:	Route of exposure not reasonably predictable. However, the product does not pose risks for acute and/or systemic toxicity.

a) Acute toxicity

Quartz	not toxic if swallowed, in contact with skin or if inhaled
Octamethylcyclotetrasiloxane	LD50 oral (rat) > 4800 mg/kg LC50 inhalation (rat) = 2975 ppm (4 hours) LD50 dermal (rabbit) > 2.5 ml/kg

No acute toxicity effect known for the product.

b) Skin corrosion/irritation
No skin corrosion/irritation effect known for the product.

c) Serious eye damage/irritation
No eye corrosion/irritation effect known for the product.

d) Respiratory or skin sensitisation
No respiratory or skin sensitisation effect known for the product.

e) Germ cell mutagenicity
No germ cell mutagenicity effect known for the product.

f) Carcinogenicity
No carcinogenicity effect known for the product.

g) Reproductive toxicity
No reproductive toxicity effect known for the product.

h) STOT-single exposure
No STOT effect known for the product after single exposure.

i) STOT-repeated exposure
The product may cause damage to organs through prolonged or repeated exposure if inhaled → this classification is determined by the content of Quartz (50 - 55%). However, since this substance is incorporated in the polymer matrix, exposure to the product is not expected to result in hazards to human health, under recommended conditions of use and storage.

j) Aspiration hazard
No aspiration hazard known for the product

SECTION 12: Ecological information

12.1. Toxicity

Quartz	not toxic for aquatic organisms

Octamethylcyclotetrasiloxane	LC50 fishes (oncorhyncus mykiss) > 0.022 mg/L (96 hours) NOEC fishes (oncorhyncus mykiss) ≥ 0.0044 mg/L EC50 invertebrates (daphnia sp.) > 0.015 mg/L (48 hours) NOEC invertebrates (daphnia magna) > 0.0079 mg/L (21 days) EC50 algae > 0.022 mg/L (96 hours) IC50 bacteria > 10000 mg/L

No effect of toxicity for aquatic organisms known for the product.

12.2. Persistence and degradability
The product, in the form in which it is placed on the market and on the basis of its chemical-physical characteristics, is not expected to be readily biodegradable.

12.3. Bioaccumulative potential
The product, in the form in which it is placed on the market and on the basis of its chemical-physical characteristics, is not expected to be bioaccumulative.

12.4. Mobility in soil
The product, in the form in which it is placed on the market and on the basis of its chemical-physical characteristics, is not expected to be mobile in soil.

12.5. Results of PBT and vPvB assessment
Product constituents do not satisfy the criteria for PBT or vPvB classification according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

12.6. Other adverse effects
Product constituents do not have effects on the ozone layer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information:	Do not discharge into drains. Contact competent authorities or authorized companies that can give indications on how to dispose. The granting of an appropriate EWC code is a specific responsibility of the waste manufacturer.
Product residues:	Incinerate in a combustion chamber, in accordance with local and national legislation, also considering the characteristics of the product at time of disposal.
Packaging:	Empty contaminated packaging and, if feasible, recover them after cleaning. Alternatively, dispose of at an authorized treatment plant, in accordance with local and national legislation.

SECTION 14: Transport information

The product is subject to the provisions of existing legislation governing the transport of dangerous goods by road (ADR), rail (RID), sea (IMDG Code) and air (IATA).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The product does not contain:
- substances of very high concern (SVHC) included in the candidate list for Authorisation
- substances of very high concern (SVHC) subjected to Authorisation (Annex XIV)
- substances subjected to Restriction (Annex XVII)

according to Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment
A chemical safety assessment has not been performed for the product.

SECTION 16: Other information

Revision:
This safety data sheet has been reviewed on the basis of the indications for filling included in Regulation (EU) 2015/830.

Evaluation method:
The hazard classification of the product has been defined according to calculation methods provided by Regulation (EC) 1272/2008 (CLP).

Full text of hazard statements (H) cited in SECTION 2 and SECTION 3:

H226	Flammable liquid and vapour
H361f	Suspected of damaging fertility
H373i	May cause damage to organs through prolonged or repeated exposure if inhaled
H413	May cause long lasting harmful effects to aquatic life

Key references and data sources:
- Regulation (EC) 1272/2008 (CLP) (and its subsequent modifications and amendments)
- Regulation (EC) 1907/2006 (REACH) (and its subsequent modifications and amendments)
- SDS of raw materials suppliers

Indications of any appropriate training for workers:
The personnel responsible for handling the product should be either informed about its hazard and the potential risks related with its use, or educated about precautions to take in order to avoid or limit exposure.

Acronyms:

ACGIH:	american conference of governmental industrial hygienists
ADR:	european agreement concerning the international carriage of dangerous goods by road
CAS:	chemical abstracts service
CLP:	classification labelling and packaging
DNEL:	derived no effect level
EC:	european comunity
EC50:	effective concentration for 50 percent of the organisms
EWC:	european waste code
IATA:	international air transport association
IC50:	inhibitory concentration for 50 percent of the organisms
IMDG Code:	international maritime dangerous goods code
LC50:	lethal concentration for 50 percent of the organisms
LD50:	lethal dose for 50 percent of the organisms
NOEC:	no observed effect concentration
OEL:	occupational exposure limit

PBT:	persistent, bioaccumulative and toxic
PNEC:	predicted no effect concentration
REACH:	registration, evaluation and authorization of chemicals
RID:	regulations concerning the international carriage of dangerous goods by rail
SCOEL:	scientific committee for occupational exposure limits
TLV:	threshold limit value
TWA:	time weighted average
vPvB:	very persistent and very bioaccumulative

Notes:

The information provided in this safety data sheet is correct to the best of our knowledge at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation and disposal and is not to be considered a warranty or quality specification. The user must verify the suitability and completeness of the information in relation to its particular use of the product.