



Material Safety Data Sheet
 May be used to comply with
 OSHA's Hazard Communication Standard.
 29 CFR 1910.1200. Standard must be
 Consulted for specific requirements.

U.S. Department of Labor
 Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (As used on Label and List)
DEGRADABLE CRUCIBLE
Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name: Orgo-Thermit, Inc.	Emergency Telephone Number: 800-424-9300
Address (Number, Street, City, State and ZIP Code) 3500 Colonial Drive North	Telephone Number for Information: 732-657-5781
Manchester, NJ 08759	Date Prepared: Revised 1-11-11
	Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Sand,

14808-60-7	Silica Sand, (SiO ₂)
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Resin,

122-99-6	Ethanol 2-phenoxy, 1.0 – 5.0%
108-95-2	Phenol, 1.0 – 5.0%
50-00-0	Formaldehyde, 0.1 – 1.0%

Co-Reactant,

107-31-3	Methyl Formate
67-56-1	Methanol

Section III – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	2.65
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water - **Very Slightly Soluble**

Appearance and Odor – **Rigid Beta Set Sand Core, Off White to Pink: Odorless**

Section IV – Fire and Explosion Data

Flash Point (Method Used) – Non-Flammable	Flammable Limits - N/A	LEL – N/A	UEL- N/A
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Extinguishing Media – **N/A**

Special Fire Fighting Procedures – **In case of fire, water should be used to keep containers cool. If containers have Thermit powder or steel in them, use only SAND and NOT water.**

Unusual Fire and Explosion Hazards – **Product contains resin that if allowed to accumulate as dust on floors and machinery could create a Combustible Dust Explosion Hazard. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids for additional guidance on management of combustible dust hazards.**

Section V – Reactivity Data

Stability	Unstable		
	Stable	X	As defined by NFPA

Incompatibility (*Materials to Avoid*): **Strong Oxidizers**

Hazardous Decomposition or Byproducts: **Product has potential to release formaldehyde vapor from decomposition during metal pouring.**

Hazardous Polymerization	May Occur		
	Will Not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry: Inhalation? **If allowed to become airborne, may cause irritation of nose, throat and lungs.**

Skin? **May cause irritation on prolonged or repeated contact.** Ingestion? **None known to Company.**

Health Hazards (*Acute and Chronic*)

Immediate Hazards:

Ingestion: None known to Company.

Inhalation: If allowed to become airborne, may cause irritation of Nose, Throat and Lungs.

Skin: May cause irritation on prolonged or repeated contact.

Eyes: May cause irritation on prolonged contact.

Delayed Hazards:

Quartz (SiO₂) 14808-60-7

Potential Cancer Hazard: Use of this product may generate silica dust which may be invisible.

Inhaled Silica Dust has been classified as a Human Carcinogen.

Inhalation of Silica Dust may cause delayed lung injury or lung fibrosis and/or other diseases which may lead to permanent disability and/or death. Silicosis is a form of disabling pulmonary fibrosis which can be progressive.

Carcinogenicity: Quartz (SiO₂) NTP: Quartz (SiO₂) IARC Monographs: Quartz (SiO₂) OSHA Regulated: Quartz (SiO₂)

Signs and Symptoms of Exposure: **14808-60-7 Quartz (SiO₂)**

CANCER HAZARD. Can cause cancer. Use of this product may generate silica dust which may be invisible. Inhaled Silica Dust has been listed by NTP and classified by IARC as a Human Carcinogen.

Inhalation of silica dust may cause delayed lung injury or lung fibrosis (including silicosis and/or pneumoconiosis) and/or other diseases which may lead to permanent disability and/or Death. Silicosis is a form of disabling pulmonary fibrosis which can be progressive.

Prolonged exposure to respirable silica may cause diminished lung capacity with shortness of breath.

Medical Conditions

Generally Aggravated by Exposure: *N/A*

Product has potential to release formaldehyde vapor from decomposition during metal pouring. The amount and level will be determined on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. See the OSHA formaldehyde standard 29CFR 1910.1048 for further details.

Emergency and First Aid Procedures: **Ingestion:** If accidentally swallowed, dilute by drinking large quantities of water. Contact Poison Control Center or Hospital Emergency Room for any additional directions.

Skin: In case of irritation flush with water.

Eyes: Immediately flush with plenty of water. Call a physician if conditions persists

Section VII – Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: **Minimize the creation & distribution of dust. Prevent entry into bodies of water.**

Waste Disposal Method:
Dispose of according to Local/State/Federal rules and regulations

Precautions to be taken in Handling and Storing:
Do not store in direct sunlight. Avoid moisture. Store in dry, well ventilated place. Keep away from humidity and frost. Never use when crucible and/or cap are wet.

Other Precautions: **Observe all instructions per manufacturer’s manual.**

Section VIII – Control Measures

Respiratory Protection (*Specify Type*): **use NIOSH/NSHA approved respiratory equipment. Respirators should be selected based on the form and concentration of contaminants in the air in accordance with OSHA Laws & Regulations or other applicable Standards or Guidelines.**

Ventilation: Hazardous emissions are normally generated when cores are exposed to molten metal due to the thermal decomposition of the binder components during pouring, cooling and shakeout operations. These emissions can reach hazardous levels and may include, but may not be limited to, carbon monoxide, carbon dioxide, benzene, aldehydes including formaldehyde, phenol, hydrogen cyanide, ammonia, and a wide variety of organic compounds including benzo pyrene. Oxygen may be deficient in pouring, cooling and shakeout areas. Hazardous particulate matter including, but not limited to, silica in the form of quartz, trydymite, and/or crystobalite, is also normally generated at hazardous concentrations at pouring, cooling and shakeout operations. All of these emissions pose significant hazards, and exposure may result in both immediate and long term health effects. It is important that proper measures be taken to prevent employee exposure to these emissions.	Local Exhaust: Yes	Special – N/A
	Mechanical (<i>General</i>) Yes	Other: N/A

Protective Gloves: Wear impervious gloves as required to prevent skin contact. Handle in accordance with good industrial hygiene and safety practices. Always use appropriate personal protective equipment.	Eye Protection: Wear safety glasses with side shields. Always use appropriate personal protective equipment.
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Other Protective Clothing or Equipment: **Always use appropriate personal protective equipment.**

Work/Hygienic Practices: **Work clothes should be changed daily. Always use appropriate personal protective equipment.**