


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)
STARTER

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)

Telephone Number for Information: **732-657-5781**

3500 Colonial Drive North

Date Prepared: **3-1-11**

Manchester, NJ 08759

Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Starters are exothermic mixtures that react to produce molten metal and a ceramic phase by-product. The reaction temperatures can exceed 4000°F, producing molten metal in excess of 2500°F. These products are intended for use with Orgo-Thermit Inc.				

Thermit® welding portions only in making permanent welds.

Copper Oxide (Cu₂O / CuO)	1317-39-1	not > 80%, by weight
Calcium Silicon (CaSi₂)	12775-68-7	not > 5%, by weight
Calcium Floride (CaF₂)	7789-75-5	not > 5%, by weight
Tin (Sn)	7440-31-5	not > 10%, by weight
Aluminum-Copper Alloy		not > 15%, by weight
< 60% Copper (Cu)	7440-50-8	
< 60% Aluminum (Al)	7429-90-5	

Section III – Physical/Chemical Characteristics

Boiling Point	n/a	Specific Gravity (H ₂ O = 1)	5.5
Vapor Pressure (mm Hg.)	n/a	Melting Point	2000°F
Vapor Density (AIR = 1)	n/a	Evaporation Rate (Butyl Acetate = 1)	n/a

Solubility in Water - **Insoluble, 0**

Appearance and Odor – **Granular, Grey-black, odorless**

Section IV – Fire and Explosion Data

Flash Point (Method Used) – Self-ignites above 1750°F (indirect heating)	Flammable Limits -	LEL n/a	UEL n/a
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Extinguishing Media **Dry sand for ignited starter**

Special Fire Fighting Procedures **In the event that the packaging materials are ignited, the immediate and direct application of large quantities of water will effectively eliminate the spread of fire to surrounding areas. The ignition of packaging materials may in rare cases lead to ignition. Direct application of continuous heavy stream of water is recommended.**

Unusual Fire and Explosion Hazards **The material is not sensitive to vibrations, shock, or impact and is not subject to any form of spontaneous ignition.**

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid – Temperatures above ignition (flash point)
	Stable	X	

Incompatibility (Materials to Avoid): **Typical of problems associated with molten metals**

Hazardous Decomposition or Byproducts: **None**

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry: Inhalation? **For excessive inhalation of dust or fumes, remove from exposure, provide fresh air, consult a physician**

Skin? **Standard treatment for burns in the event of contact with molten metal or slag**

Ingestion? **Yes**

Health Hazards (Acute and Chronic): **Improper use of the product can result in aggressive reactions.**

Self propagating high temperature reaction will occur if heated above ignition temperature.

Burns from contact with reaction and reaction products are possible.

Carcinogenicity: NTP? **No** IARC Monographs? **No** OSHA Regulated? **No**

Signs and Symptoms of Exposure: **Not known to the company**

Medical Conditions

Generally Aggravated by Exposure: **Eye contact exposure to powdered metals should be treated by flushing eye with large amounts of water from nasal area outward. Consult a physician if irritation persists.**

Emergency and First Aid Procedures: **Standard treatment for burns in the event of contact with molten metal or slag. Eye contact with molten metal or reaction by-products requires immediate medical attention.**

Section VII – Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: **All unused, spilled materials, may be swept up for disposal, in accordance with local regulations and guidelines.**

Waste Disposal Method: **According to local rules**

Precautions to be taken in Handling and Storing: **Should be stored in clean, dry and secure location. Keep away from heat and sparks. If proper storage is maintained, the materials do not exhibit any storage or shelf-life.**

All product instructions should be followed to ensure proper welding and safety.

Other Precautions: **Stay clear when the reaction is initiated, never use wet Starters.**

Section VIII – Control Measures

Respiratory Protection (Specify Type): **Normal use precludes use of special protection as material is generally used outdoors, in small quantities, and is of short duration.**

Ventilation	Local Exhaust: When used in confined spaces	Special: Use of NIOSH approved respirator for dust and metal fumes in lieu of local exhaust
	Mechanical (General)	Other:

Protective Gloves: **Recommended for handling hot equipment**

Eye Protection: **Safety glasses recommended, Dark**

Other Protective Clothing or Equipment: **Fire resistant overalls or aprons recommended**