

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Thermit™

Signal Word  
**DANGER**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10426

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable solids (Category 2). Flammable solid (H228). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



On ignition the reaction produces a temperature of approximately 2200 °C which will soften steel. A typical oxide/metal reaction which provides its own oxygen supply and is very, very, difficult to stop.

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Thermit, Black (a proprietary mixture of iron oxide, aluminum, ferro manganese, and ferro vanadium)	69012-31-3			
Note: Percent composition of each ingredient is protected under confidential business information clause of GHS.				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Flammable solid.

NFPA Code

Dangerous fire risk; once reaction has started, it is very difficult to stop.

H: 1

In case of fire: Use a Class D or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water.

F: 1

R: 0

No Water

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Remove all ignition sources and water. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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## SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates. Store in Flinn Saf-Stor™ can inside a dedicated flammables cabinet. Use explosion-proof electrical and ventilating equipment (P241).

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Wear dark safety glasses when igniting thermit or using thermit ignition sticks. Wash hands thoroughly after handling.

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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Black powder. Odorless.

Autoignition temperature: greater than 1830 °F/ 999 °C

Melting point: greater than 1220 °F/ 660 °C

Specific gravity: greater than 1 g/mL @ 20 °C

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## SECTION 10 — STABILITY AND REACTIVITY

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Avoid sources of ignition. (i.e. open flame, sparks) and moisture. Shelf life: Good, if stored properly.

Incompatible materials: Reacts with acids and caustic solutions to produce hydrogen.

Hazardous decomposition products: Can produce hydrogen when exposed to caustic solutions or acids.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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Acute effects: N.A.

ORL-RAT LD<sub>50</sub>: N.A.

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

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## SECTION 12 — ECOLOGICAL INFORMATION

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Data not yet available.

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

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## SECTION 14 — TRANSPORT INFORMATION

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

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## SECTION 15 — REGULATORY INFORMATION

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RCRA Code D001.

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## SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

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