

# Material Name: **Block Iron**<sup>™</sup> Bonded Composite Scrap Iron Blocks

The composition, manufacturing and use of this product are protected by U.S. Patent Number 6,743,275.

* * * Section 1 - Product and Company Identification * * *				
Chemical Name: Scrap Iron Mixture				
Product Use: Ferrous Melting Scrap for Foundries and Steel Mills				
Safety Department: 800-666-4789				
24 hr. Emergency: 800-424-9300				

#### \* \* \* Section 2 - Composition / Information on Ingredients \* \* \*

Matrix Binder System	< 5% by weight
Mixed Sodium Salts (proprietary)	< 0.5%
Silicon Dioxide (amorphous)	2.5 - 5.0%
Sodium Oxide	0.5 – 1.0%
Scrap Iron Aggregates	> 90%
Carbon Aggregates	< 5%

**Information on Non-Hazardous Components :** Processing of this article may produce hazardous vapors, fumes, mists and dusts which are considered hazardous under 29 CFR 1910.1200 (Hazard Communication). The composition of scrap metal can vary based upon the raw materials, processes used, and protective coatings or lubricants that may have been applied to the original materials. It is anticipated that the hazardous materials present in the coatings or lubricants would generally represent less than 0.1% of the total material present.

#### \* \* \* Section 3 - Hazards Identification \* \* \*

**Emergency Overview:** This is a non-combustible, non-reactive solid material. Processing of the product can include formation of dusts, particulates or fumes which may present certain health hazards.

**CAUTION**: Dusts, particulates or fumes generated from this product may be irritating to the eyes, skin and respiratory system.

**Potential Health Effects:** Dust may cause irritation and/or inflammation to the eye tissue; product contains trace levels of components that may cause allergic skin reactions. Dust or powder may irritate the skin. This product may produce skin abrasions, lesions, or cuts; ingestion of this product is unlikely; however if ingested, may cause gastrointestinal disturbances, abdominal pain, vomiting, and diarrhea; product contains trace levels of components that may cause allergic respiratory sensitization.

HMIS Ratings:	Health: 1	Fire: 0	Reactivity	: 0
	Personal Pr	otection: saf	ety glasses w	ith side shields, gloves
Hazard Scale:	0 = Minimal	1 =	Slight	2 = Moderate
	3 = Serious	4 =	Severe	* = Chronic Hazard

#### \* \* \* Section 4 - First Aid Measures \* \* \*

**Eyes:** In case of contact, flush immediately with water for at least 15 minutes. Do not rub eyes. If irritation persists get medical attention. In case of mechanical abrasions and cuts, seek medical attention immediately.

**Skin:** Wash immediately with soap and water. If irritation persists, get medical attention. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area.

**Ingestion:** Unlikely to occur. If ingestion does occur, seek immediate medical attention. Do not induce vomiting unless directed to do so by medical personnel. Inhalation

Inhalation: Immediately remove the affected person to fresh air

### \* \* \* Section 5 - Fire Fighting Measures \* \* \*

Flash Point: Not applicableMethod Used: Not applicableAuto Ignition: Not applicableFlammability Classification: Non-flammableGeneral Fire Hazards: Dust accumulation from this product may present an<br/>explosion hazard in the presence of an ignition source. Coatings and oils contained<br/>in the product may enhance flammability.

**Hazardous Combustion Products:** May release metal oxide fumes during melting. **Extinguishing Media:** Dry chemical or sand. DO NOT USE WATER - Molten metal reacts violently with water.

**Fire Fighting Equipment/Instructions:** Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### \* \* \* Section 6 - Accidental Release Measures \* \* \*

**Containment Procedures:** Containment of this material should not be necessary. If dusts or particulates are generated, eliminate sources of ignition.

**Clean-Up Procedures:** Collect dust or particulates using broom and shovel. Put material in suitable, covered, labeled containers for reuse.

Evacuation or Special Procedures: None necessary

## \* \* \* Section 7 - Handling and Storage \* \* \*

**Handling Procedures:** Avoid inhaling dusts or vapors produced during melting. Avoid eye and excessive skin contact. Use only with adequate ventilation. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Special care must be taken to avoid buildup of dusts. **Storage Procedures:** Keep this material in a well-ventilated place.

\* \* \* Section 8 - Exposure Controls / Personal Protection \* \* \*

**Exposure Guidelines:** Minimize dusts, particulates and fumes

**Engineering Controls:** Ventilation sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or melting **Personal Protective Equipment:** Wear safety glasses with side shields; Use gloves; When dusts or melting fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH approved respiratory protection must be provided.

## \* \* \* Section 10 - Chemical Stability & Reactivity Information \* \* \*

Appearance:	Black to Gray 4 inch cubes	Odor:	None
Physical State:	Solid	pH:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	About 5400 °F	Melting Point:	About 2350° F
Solubility (H <sub>2</sub> O):	Insoluble	Specific Gravity:	3.5 – 4.5

# \* \* \* Section 9 - Physical & Chemical Properties \* \* \*

Chemical Stability: Stable under normal conditions.

**Conditions to Avoid:** <u>This product should not be added to a heel of liquid metal</u> <u>unless the blocks have been preheated to above 250°F.</u> Molten metal may react violently with water. Fine particles, dust or fumes may be flammable or explosive. **Incompatibility:** None expected

Hazardous Decomposition: May yield metallic oxides during melting. Hazardous Polymerization: Will not occur

## \* \* \* Section 11 - Toxicological Information \* \* \*

All components listed are exempt from TSCA inventory. Under normal conditions of handling, the likelihood of inhaling or ingesting amounts necessary for toxic effects to occur is very small.

## \* \* \* Section 12 - Ecological Information \* \* \*

No information available for the product.

## \* \* \* Section 13 - Disposal Considerations \* \* \*

Byproducts and residues from this product may be reprocessed or recycled.

* * * Section 14 - Transportation Information * * *				
US DOT Information:	Shipping Name: Scrap Iron Metal			
Hazard Class: None Required Label(s): None	UN/NA #: Not available.			

\* \* \* Section 15 - Regulatory Information \* \* \* US Federal Regulations: None applicable

#### \* \* \* Section 16 - Other Information \* \* \*

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. *Rev. 6/20/06 by T. Cobett*