



SAFETY DATA SHEET

Date Issued : 04/02/2015

SDS No : 2014-05

Date Revised : 09/28/2018

Revision No : 5

1. PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Abrasives, roofing products and other aggregate uses

PRODUCT DESCRIPTION: BLACK BEAUTY IRON Blend

GENERIC NAME: BLACK BEAUTY® IRON Blend

MANUFACTURER

Harsco Corporation
Metals & Minerals
350 Poplar Church Road
Camp Hill, PA 17011

Emergency Contact: Customer Service Department

Emergency Phone: 888-733-3646 x2

Alternate Contact: EHS Manager

Alternate Emergency Phone: 717-706-2447

E-Mail: reedcs@harsco.com

24 HR. EMERGENCY TELEPHONE NUMBERS

855-393-9889

Access Code 13793

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Not Classified.

Environmental:

Not Classified.

Physical:

Not Classified.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Solid

IMMEDIATE CONCERNS: BLACK BEAUTY IRON Blend is not flammable, combustible or explosive; and poses no unusual hazard in the unused condition. During use for abrasive blasting, the dust may irritate the respiratory tract, skin and eyes; and may cause inflammation and pulmonary fibrosis. Refer to Section 3 for a listing of heavy metals that are present in BLACK BEAUTY Iron. Appropriate care should be taken in the storage and disposal of this product.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	20 - 67	1309-37-1
Silica, Amorphous	28 - 46	60676-86-0
Aluminum Oxide	3 - 20	1344-28-1
Calcium Oxide	2 - 6	1305-78-8
Magnesium Oxide	0.5 - 2	1309-48-4
Sulfur Trioxide	0.5 - 2	7446-11-9
Sodium Oxide	0.3 - 2	1313-59-3
Copper	0.4 - 1	7440-50-8
Lead	0.15 - 0.25	7439-92-1

Molybdenum	0.1 - 0.25	7439-98-7
Manganese	0.02 - 0.07	7439-96-5
Zinc	0.4 - 2	7440-66-6
Arsenic	0.01 - 0.04	7440-38-2
Nickel	0.01 - 0.02	7440-02-0
Cadmium	0.001 - 0.002	7440-43-9
Silica, Crystalline	< 0.1	14808-60-7

4. FIRST AID MEASURES

EYES: Do not rub eyes. Remove contact lenses. Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation continues, continue flushing for 15 minutes, rinsing from time to time under the eyelids. If discomfort continues, consult a physician.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Rinse mouth thoroughly if ingested. Do not induce vomiting. If discomfort continues, consult a physician.

INHALATION: Move to fresh air. Dust in throat and nasal passages should clear spontaneously. If discomfort continues, consult a physician.

NOTES TO PHYSICIAN: Treat symptomatically.

COMMENTS: Show this Safety Data Sheet to physician in attendance.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: This product is non-combustible.

GENERAL HAZARD: None known

EXTINGUISHING MEDIA: Use fire-extinguishing media appropriate for surrounding materials.

FIRE FIGHTING PROCEDURES: Move product containers from fire area if it can be done without risk. Cool containers by flooding with water until heat is dissipated.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

6. ACCIDENTAL RELEASE MEASURES

LARGE SPILL: Avoid runoff into storm sewers and ditches that lead to waterways. Collect spillage using a vacuum equipped with a HEPA filter. If not possible, gently moisten before collecting with shovel and broom. Dispose of collected materials in accordance with Federal, State and local regulations.

GENERAL PROCEDURES: Never return spillage and clean-up materials to original product containers.

RELEASE NOTES: In the unused form, the material is non-hazardous as defined in state and federal regulations.

COMMENTS: Ensure clean-up is conducted by trained personnel wearing appropriate respiratory protection. Avoid inhalation of dust and contact with skin and eyes. Ventilate area if there is excessive airborne dust.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid inhalation of dust and contact with skin and eyes. Use only with adequate ventilation. Use work methods that minimize dust production. Keep workplace clean. Observe good industrial hygiene practices.

HANDLING: Follow Safety Data Sheet and label precautions.

STORAGE: Keep container tightly closed. Store away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	EXPOSURE LIMITS			
	Type		ppm	mg/m ³
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	OSHA PEL	TWA		10 as iron oxide fume
	ACGIH TLV	TWA		5
Silica, Amorphous	OSHA PEL	TWA	20 millions of particles per ft ³	80 / %SiO ₂
	ACGIH TLV	TWA		10 mg/m ³ for inhalable particles and 3 mg/m ³ for respirable particles
Aluminum Oxide	OSHA PEL	TWA		PEL is 15 mg/m ³ total dust and 5 mg/m ³ respirable particles (as aluminum metal)
	ACGIH TLV	TWA		1 R as aluminum metal
Calcium Oxide	OSHA PEL	TWA		5
	ACGIH TLV	TWA		2
Magnesium Oxide	OSHA PEL	TWA		15 as magnesium oxide fume
	ACGIH TLV	TWA		10 l
Copper	OSHA PEL	TWA		1
Lead	OSHA PEL	TWA		0.050
	ACGIH TLV	TWA		0.05
Manganese	ACGIH TLV	TWA		0.2
Nickel	ACGIH TLV	TWA		1.5 l
Silica, Crystalline	OSHA PEL	TWA		0.05
	ACGIH TLV	TWA		0.025 R

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. Use tight fitting goggles if dust is generated.

SKIN: Use protective gloves. Wear suitable protective clothing.

RESPIRATORY: Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

WORK HYGIENIC PRACTICES: Wash hands after handling. Routinely wash work clothing and protective equipment. Handle in accordance with good industrial hygiene and safety practice.

COMMENTS: Proper and safe use of the material is solely the purchaser's responsibility. The manufacturer extends no warranties and makes no representations as to the suitability of the product for the purchaser's intended purpose or the consequences of purchaser's actions.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: None

APPEARANCE: Black, granular solid

COLOR: Black

pH: Not Available

FLASH POINT AND METHOD: Not Available

FLAMMABLE LIMITS: Not available.

VAPOR PRESSURE: Not Available

VAPOR DENSITY: Not Available

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: Not Available

SOLUBILITY IN WATER: None Expected

SPECIFIC GRAVITY: 2.8 - 3.8

VISCOSITY: Not Available

COMMENTS: For additional information contact manufacturer.

10. STABILITY AND REACTIVITY

STABILITY: This product is stable and non-reactive under normal conditions of use, storage and transport.

CONDITIONS TO AVOID: None known

POSSIBILITY OF HAZARDOUS REACTIONS: None

HAZARDOUS DECOMPOSITION PRODUCTS: None known

INCOMPATIBLE MATERIALS: Hydrofluoric acid

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

NOTES: Abrasive blasting agents may cause inflammation and pulmonary fibrosis. Ingestion of dusts generated during working operations may cause nausea and vomiting.

SKIN CORROSION/IRRITATION: None known

RESPIRATORY OR SKIN SENSITISATION: Not a skin or respiratory sensitizer.

GERM CELL MUTAGENICITY: None known

CARCINOGENICITY

IARC: Copper slag (CAS No. 67711-92-6) is not listed by IARC.

NTP: Copper slag (CAS No. 67711-92-6) is not listed by the National Toxicology Program in their Annual Report.

OSHA: Copper slag (CAS No. 67711-92-6) is not listed by NIOSH on their Occupational Cancer List.

NOTES:

ACGIH Carcinogens

- Copper slag (CAS 67711-92-6) No designation listed.
- Aluminum oxide (CAS 1344-28-1) A4 Not classifiable as a human carcinogen.
- Iron oxide (CAS 1309-37-1) A4 Not classifiable as a human carcinogen.
- Magnesium oxide (CAS 1309-48-4) A4 Not classifiable as a human carcinogen.
- Arsenic (7440-38-2) A1 Confirmed human carcinogen.
- Cadmium (CAS 7440-43-9) A2 Suspected human carcinogen.
- Copper (CAS 7440-50-8) No designation listed.

- Lead (CAS 7439-92-1) A3 Confirmed animal carcinogen with unknown relevance to humans.
- Manganese (CAS 7439-96-5) A4 Not classifiable as a human carcinogen.
- Nickel (CAS 7440-02-0) A5 Not suspected as a human carcinogen.
- Zinc (CAS 7440-66-6) A4 No designation listed.

IARC Monographs. Overall Evaluation of Carcinogenicity

- Arsenic (7440-38-2) Group 1. Monographs 23 and 100C (2012).
- Cadmium (CAS 7440-43-9) Group 1. Monographs 58 and 100C (2012).
- Lead (CAS 7439-92-1) Possibly carcinogenic to humans.
- Nickel (CAS 7440-02-0) Possibly carcinogenic to humans.

US NTP Report on Carcinogens

- Arsenic (7440-38-2) Known to be a human carcinogen.
- Cadmium (CAS 7440-43-9) Known to be a human carcinogen.
- Nickel (CAS 7440-02-0) Reasonably anticipated to be a human carcinogen.
- Lead (CAS 7439-92-1) Reasonably anticipated to be a human carcinogen.

REPRODUCTIVE TOXICITY: None known

STOT-SINGLE EXPOSURE: Irritation of nose and throat. Irritation of eyes and mucous membranes. May cause respiratory tract irritation. Shortness of breath.

COMMENTS: Although manufacturer has taken reasonable care in the preparation of this Safety Data Sheet, no warranties are made. Manufacturer makes no representations and assumes no responsibility as to the accuracy or suitability of the Safety Data Sheet for the applications intended by the purchaser.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

ECOTOXICOLOGICAL INFORMATION: This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

BIOACCUMULATION/ACCUMULATION: This product is not bioaccumulating.

DISTRIBUTION: Not Available

AQUATIC TOXICITY (ACUTE): None known

CHEMICAL FATE INFORMATION: Not Available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose in accordance with all applicable regulations.

GENERAL COMMENTS: TCLP testing of unused product indicates that it is not hazardous waste by characteristic.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

OTHER SHIPPING INFORMATION: Unused product is not regulated as a hazardous material by DOT.

COMMENTS: Unused product is not regulated as dangerous goods by the International Air Transport Association (IATA), International Maritime Dangerous Goods (IMDG) or Transport Canada (TDG).

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Hazardous Chemical.

313 REPORTABLE INGREDIENTS: Arsenic (CAS No. 7440-38-2), Cadmium (CAS No. 7440-43-9), Copper (CAS No. 7440-50-8), Lead (CAS No. 7439-92-1), Manganese (CAS No. 7439-96-5), Nickel (CAS No. 7440-02-0)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Lead	0.15 - 0.25	7439-92-1

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Copper	0.4 - 1	5,000
Lead	0.15 - 0.25	10
Arsenic	0.01 - 0.04	1
Nickel	0.01 - 0.02	100

CERCLA RQ: None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	1309-37-1
Silica, Amorphous	60676-86-0
Aluminum Oxide	1344-28-1
Calcium Oxide	1305-78-8
Magnesium Oxide	1309-48-4
Sulfur Trioxide	7446-11-9
Sodium Oxide	1313-59-3
Copper	7440-50-8
Lead	7439-92-1
Manganese	7439-96-5
Arsenic	7440-38-2
Nickel	7440-02-0
Silica, Crystalline	14808-60-7

TSCA STATUS: Copper slag (CAS No. 67711-92-6) and all of its components are listed on the TSCA Chemical Substance Inventory.

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Sulfur Trioxide	0.5 - 2	7446-11-9

40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION: None

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: None



CALIFORNIA PROPOSITION 65:

WARNING: This product can expose you to chemicals including cadmium, which are known to

the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name	Wt.%	Listed
Lead	0.15 - 0.25	<ul style="list-style-type: none"> ● Cancer ● Developmental Toxicity ● Female Reproductive ● Male Reproductive

RCRA STATUS: Not regulated.

OSHA HAZARD COMM. RULE: Regulated.

CLEAN WATER ACT: Not covered by any water quality criteria under Section 304.

CARCINOGEN: Copper slag (CAS No. 67711-92-6) is not listed by IARC, NIOSH or the NTP as a known or suspected carcinogen. However based upon the presence of arsenic and cadmium, the product would be classified as a Category 2 Carcinogen pursuant to the GHS Classification System.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION

Not Controlled.

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Not controlled.

WHMIS CLASS: This product has been classified in accordance with the hazard criteria of the CPR and the Safety Data Sheet contains all of the information required by the CPR.

DOMESTIC SUBSTANCE LIST (INVENTORY): Listed on Inventory.

MEXICO This Safety Data Sheet has been prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. OTHER INFORMATION

Date Revised: 09/28/2018

REVISION SUMMARY: This SDS replaces the 09/06/2018 SDS. Revised: **Section 15: CALIFORNIA PROPOSITION 65.**

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	A

NFPA CODES

