

SAFETY DATA SHEET

Date Prepared : 04/02/2015

SDS No : 2014-01

Date Revised : 04/08/2015

Revision No : 1

1. PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Abrasives, roofing products and other aggregate uses

PRODUCT DESCRIPTION: BLACK BEAUTY® GLASS

PRODUCT FORMULATION NAME: Abrasive

GENERIC NAME: BLACK BEAUTY® GLASS

MANUFACTURER

Harsco Corporation
Metals & Minerals
5000 Ritter Road
Suite 205

Mechanicsburg, PA 17055

Emergency Contact: EHS Manager

Emergency Phone: 717-506-4666

Alternate Emergency Phone: 888-733-3646

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: Crushed glass consists of glass fragments that are not flammable, combustible or explosive; and pose no unusual hazard in their unused condition. During use for abrasive blasting, the dust may irritate the respiratory tract, skin and eyes; and may cause inflammation and pulmonary fibrosis.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS |
|---------------------|---------|------------|
| Silica, Amorphous | 70 - 80 | 60676-86-0 |
| Sodium Oxide | 10 - 15 | 1313-59-3 |
| Calcium Oxide | 5 - 10 | 1305-78-8 |
| Aluminum Oxide | 1 - 2 | 1344-28-1 |
| Potassium Oxide | 0.1 - 1 | 12136-45-7 |
| Magnesium Oxide | 0.1 - 1 | 1309-48-4 |
| Iron Oxide | 0.1 - 1 | 1309-37-1 |
| Silica, Crystalline | < 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. 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) | | | | | | | |
|---|------|-----------------|-------------------|-----------|-------------------|--------------|-------------------|
| | | EXPOSURE LIMITS | | | | | |
| | | OSHA PEL | | ACGIH TLV | | Supplier OEL | |
| Chemical Name | | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ |
| Silica, Amorphous | TWA | 20 mpp | 80 | | | | |
| Calcium Oxide | TWA | | 5 | | 2 | | |
| Aluminum Oxide | TWA | | 15 T, | | | | |
| | STEL | | | 10 | | | |
| Silica, Crystalline | TWA | 250mpp | 10 | | 0.025 | NL | NL |
| | STEL | | | | | NL | NL |

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 to remove contaminants. 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: Crushed glass.

COLOR: Variable. Multi-colored glass.

pH: Not Available

FLASH POINT AND METHOD: Not Available

FLAMMABLE LIMITS: Not Available

VAPOR PRESSURE: Approximately zero

VAPOR DENSITY: NA = Not Applicable

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: 1580 degree C

SOLUBILITY IN WATER: Practically insoluble

EVAPORATION RATE: NA = Not Applicable

SPECIFIC GRAVITY: 2.5

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

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

EYE EFFECTS: May cause eye irritation.

SKIN EFFECTS: May cause skin irritation.

CHRONIC: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

CARCINOGENICITY

IARC: Glass (CAS No. 60676-86-0) is listed as Group 3 - no evidence that it causes cancer.

NTP: Glass (CAS No. 60676-86-0) is not listed by the National Toxicology Program in their Annual Report.

OSHA: Glass (CAS No. 60676-86-0) is not listed by NIOSH on their Occupational Cancer List.

Notes:

ACGIH Carcinogens

- Aluminum oxide (CAS 1344-28-1) A4 Not classifiable as a human carcinogen.
- Glass (CAS 60676-86-0) is not listed by ACGIH.
- 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.
- Silicon dioxide, crystalline (CAS 14808-60-7) A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

- Iron oxide (CAS 1309-37-1) 3 Not classifiable as to carcinogenicity to humans.
- Silicon dioxide (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.
- Silicon dioxide, crystalline (CAS 14808-60-7) Group 1. Monographs 68 and 100C (2012).

US NTP Report on Carcinogens: Known Carcinogen

- Silicon dioxide, crystalline (CAS 14808-60-7) Known To Be Human Carcinogen.

CORROSIVITY: None known

SENSITIZATION: Not a skin or respiratory sensitizer.

NEUROTOXICITY: None known

GENETIC EFFECTS: None known

REPRODUCTIVE EFFECTS: None known

TARGET ORGANS: Irritation of nose and throat. Irritation of eyes and mucous membranes. May cause respiratory tract irritation. Shortness of breath.

TERATOGENIC EFFECTS: None known

MUTAGENICITY: None known

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 IATA, IMDG or TDG.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Hazardous Chemical.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Aluminum oxide (CAS 1344-28-1)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

| Chemical Name | Wt.% | CAS |
|----------------|-------|-----------|
| Aluminum Oxide | 1 - 2 | 1344-28-1 |

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None

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

CERCLA RQ: None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

| Chemical Name | CAS |
|---------------------|------------|
| Silica, Amorphous | 60676-86-0 |
| Sodium Oxide | 1313-59-3 |
| Calcium Oxide | 1305-78-8 |
| Aluminum Oxide | 1344-28-1 |
| Potassium Oxide | 12136-45-7 |
| Magnesium Oxide | 1309-48-4 |
| Iron Oxide | 1309-37-1 |
| Silica, Crystalline | 14808-60-7 |

TSCA STATUS: Glass (CAS No. 60676-86-0) is listed on the TSCA Chemical Substance Inventory.

CLEAN AIR ACT

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 contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

RCRA STATUS: Not regulated.

OSHA HAZARD COMM. RULE: Regulated.

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

CARCINOGEN: Glass (CAS No. 60676-86-0) is not listed by IARC, NIOSH or the NTP as a known or suspected carcinogen.

However based upon the presence of crystalline silica, 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: 04/08/2015

REVISION SUMMARY: This SDS replaces the 04/02/2015 SDS.

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

