

STRATEGIC MATERIALS

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: Crushed Glass

PRODUCT USE: Additive/Raw Material

CAS REGISTRY NUMBER: 65997-17-3 (Glass, oxide)

TSCA REGISTRY NUMBER: 65997-17-3

MANUFACTURER: Strategic Materials, Inc.
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PREPARATION/REVISION DATE: January 1, 2009

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT NAME: Crushed Glass

CHEMICAL NAME: Soda-Lime Glass

SYNONYMS: Glass Fragments

HAZARDOUS COMPONENTS: None Identified

EXPOSURE STANDARDS: OSHA PEL* : 15 mg/m³ total dust
5 mg/m³ respirable dust
ACGIH TLV** : 10 mg/m³
CAL/OSHA: 10 mg/m³

* = Permissible exposure limit

** = Threshold limit value

COMPONENT/REGULATORY INFORMATION

COMPONENT	PERCENT IN MIXTURE	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Silicon dioxide	72-81	15 (total dust) 5 (respirable fraction)	10
Calcium oxide	9.75-8.58	2	2
Sodium oxide	13-14	Not Listed	Not Listed
Aluminum oxide	.2-.4	Not Listed	10
Iron oxide	0-0.356	10	5
Magnesium oxide	3-4	10 (fume)	10 (fume)
Potassium oxide	0.1-0.4	Not Listed	Not Listed
Other oxides	<0.25	Not Listed	Not Listed

Note: Surface coatings, including paints, inks, and other colorants, may have been applied to the recycled material prior to processing by Strategic Materials, Inc. It is anticipated that any hazardous materials that may be present in the coatings would generally represent less than 0.1% of the total material present.

National Fire Protection Association (NFPA) Classification:

Health 1
 Flammability 0
 Reactivity 0

Hazardous Materials Information Systems (HMIS):

Red: (Flammability) 0
 Yellow: (Reactivity) 0
 Blue: (Acute Effects)1

TSCA NUMBER: 65997-17-3
 RCRA (40 CFR 261): Non Regulated
 CERCLA (SUPERFUND): Not listed under any section
 CWA (CLEAN WATER ACT): Not covered by any Water Quality Criteria under Section 304.
 SAFE DRINKING WATER ACT: Not listed
 NTP ANNUAL REPORT ON CARCINOGENS: Not listed as a carcinogen.
 OSHA CARCINOGEN: Not listed as an OSHA carcinogen.
 IARC: Not listed as a carcinogen.
 PROP 65: Not listed as a carcinogen or reproductive toxin.

SECTION 3. PHYSICAL & CHEMICAL PROPERTIES

SOLUBILITY IN WATER:	non soluble
APPEARANCE AND ODOR:	Crushed - odorless
ODOR THRESHOLD:	None
SOFTENING POINT	724°C/1335.2°F
pH VALUE:	Not Available
SPECIFIC GRAVITY (H ₂ O = 1):	2.46-2.49
VAPOR PRESSURE:	Not Applicable
PERCENT VOLATILE (VOLUME %):	Not Applicable

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

GENERAL HAZARD:	None
UEL/LEL:	Not Available
AUTOIGNITION TEMPERATURE:	Not Available
FLASH POINT:	Not applicable
EXTINGUISHING MEDIA:	Non-combustible
FLAMMABILITY CLASSIFICATION:	Not Applicable
SPECIAL FIRE FIGHTING PROCEDURES:	Special fire fighting procedures are not associated with this product, however, firefighters should wear positive pressure, self contained breathing apparatus if this product is found with other materials.

SECTION 5. STABILITY & REACTIVITY

STABILITY:	Stable.
INCOMPATIBILITY:	Inert material - not applicable
HAZARDOUS DECOMPOSITION PRODUCTS:	Surface coatings, including paints, inks, and other colorants, may have been applied to the material prior to processing by Strategic Materials, Inc. Some organic material may also be present. Strategic Materials, Inc. may have no specific knowledge of the particular coatings or organic chemicals.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 6. HEALTH HAZARD INFORMATION

EMERGENCY OVERVIEW:	Crushed Glass consists of glass fragments that are not flammable, combustible, or explosive, and it presents no unusual hazard if involved in a fire. Contact with eyes, skin or mucous membranes may cause irritation. Glass presents little hazard (to humans) and has low acute oral toxicity.
ROUTES OF EXPOSURE:	Inhalation, direct contact with eyes or skin, incidental ingestion
INHALATION:	Dust may cause irritation to the nose, throat, and respiratory tract.
EYE CONTACT:	May cause irritation and transient corneal injury.
DERMAL CONTACT:	Dust may cause irritation. Small particles embedded in skin may cause swelling and ulceration.
INGESTION:	Ingestion may cause irritation of the digestive tract.
CANCER:	This product (or any component of this product) is not considered a carcinogen.
REPRODUCTIVE:	No data available for this product.

SECTION 6. HEALTH HAZARD INFORMATION (Continued)

TARGET ORGANS:	No target organs have been determined in humans or animals from this product.
SIGNS AND SYMPTOMS OF EXPOSURE:	Symptoms of accidental over-exposure may be associated with irritation of the eyes, nose, throat and respiratory tract. Accidental ingestion may cause adverse digestive tract effects.
EMERGENCY/FIRST AID PROCEDURES	EYES: Immediately flush eyes with water for 15 minutes. If irritation persists, call a physician. SKIN: Wash with soap and water until no evidence of chemical remains (15-20 minutes). INHALATION: Remove from exposure area to fresh air immediately. Treat symptomatically and supportively. INGESTION: Rinse mouth with water. If vomiting occurs, have victim lean forward to reduce risk of aspiration. NOTE TO PHYSICIAN: Treat symptomatically and supportively.

SECTION 7. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use local exhaust ventilation system to keep dust levels down. If using this product as an abrasive blast agent in confined areas, airborne dust levels should be controlled by physical enclosure of the abrasive blasting operation. The enclosure should be exhaust ventilated in accordance with 29 CFR 1910.94 Ventilation (a) Abrasive blasting.
EYE PROTECTION:	Use splash proof or dust resistant goggles.
SKIN PROTECTION:	Not typically required, however, depending on the application, the user may elect to wear leather gloves, apron, boots or whole bodysuit, as appropriate.
RESPIRATORY PROTECTION:	A NIOSH/MSHA approved air purifying respirator with a dust/mist cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. For abrasive blasting use a continuous flow air-line respirator covering head, neck, and shoulders to provide protection from rebound abrasive per 29 CFR 1910.94 (a)(5).

SECTION 8. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS OR LEAKS:

The components of this product are non-hazardous wastes when spilled or disposed of, as defined in the Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 261).

SECTION 9. HANDLING AND STORAGE

GENERAL:

Store in dry area. Keep container tightly closed. Good housekeeping should be maintained to minimize dust accumulation and generation.

HYGIENIC PRACTICES:

Do not get in eyes, on skin or clothing. Wash hands thoroughly after handling, and before eating, drinking, or smoking.

NOTICE

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Strategic Materials, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

REFERENCES

- Amdur, M.O., J. Doull, and C.D. Klassen, eds. 1991. *Cassarett and Doull's Toxicology: The Basic Science of Poisons*. 4th ed. New York: Pergamon Press.
- American Conference of Governmental Industrial Hygienists (ACGIH). 1986. *Documentation of threshold limit values and biological exposure indices*. 5th ed. Cincinnati, OH.
- American Conference of Governmental Industrial Hygienists (ACGIH). 1990. *1990-1991 Threshold limit values for chemical substances and physical agents and biological exposure indices*. Cincinnati, OH.
- Budavari, S., M.J. O'Neil, A. Smith, and P.E. Heckelman, eds. 1989. *The Merck Index*. 11th ed. Rahway, NJ: Merck & Co., Inc.
- Clayton, G.D., and F.E. Clayton, eds. 1981. *Patty's industrial hygiene and toxicology*. 3d ed. New York: Wiley & Sons.
- Department of Transportation (DOT). 1990. 49 § 172.102. October 1.
- Department of Transportation (DOT). 1991. 46 § 150.105. August 23.
- Gosselin, R.E., R.P. Smith, and H.C. Hodge. 1984. *Clinical Toxicology of Commercial Products*. 5th ed. Baltimore, MD: Williams and Wilkins.
- Grant, W.M. 1974. *Toxicology of the Eye*. 2nd ed. Springfield, IL: Charles C. Thomas.
- International Agency for Research on Cancer (IARC). 1987. *IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans*. Supplement 7, *Overall evaluations of carcinogenicity: An updating of IARC monographs 1 to 42*. Lyon, France: World Health Organization.
- National Library of Medicine (NLM). 1991a. *Hazardous substances databank*. Bethesda, MD.
- National Library of Medicine (NLM). National Institute for Occupational Safety and Health (NIOSH). Department of Health and Human Services. 1991b. *Registry of toxic effects of chemical substances (RTECS)*.
- National Toxicology Program (NTP). Division of Toxicology Research and Testing. 1991. *Chemical status report*. Research Triangle Park, NC. July.
- Occupational Safety and Health Administration (OSHA). 1990. 29 § 1910.1000. July 1.
- Sax, N.I., and R.J. Lewis, Sr., eds. 1989. *Dangerous properties of industrial materials*. 7th ed. New York: Van Nostrand Reinhold.
- Shepard, T.H. 1986. *Catalog of teratogenic agents*. 5th ed. Baltimore, MD: Johns Hopkins University Press.
- Sittig, M. 1985. *Handbook of toxic and hazardous chemicals and carcinogens*. 2d ed. Park Ridge, NJ: Noyes Publications.

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