

MATERIAL SAFETY DATA SHEET

Continental Glass Cleaning Crystals

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PRODUCT NAME: Continental Glass Cleaning Crystals
PRODUCT CODE: 74-1410

HMIS CODES: H F R P
3 0 1 J
WHMIS: E - Corrosive

=====**SECTION I - MANUFACTURER IDENTIFICATION**=====

MANUFACTURER'S NAME: CONTINENTAL PRODUCTS COMPANY
ADDRESS : 1150 East 222 Street
Euclid, OH 44117

EMERGENCY PHONE : (800)255-3924 DATE PRINTED : 05/02/05
INFORMATION PHONE : (216)531-0710 NAME OF PREPARER : John Stevens

=====**SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION**=====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ 76°F	WEIGHT PERCENT
+‡ AMMONIUM ACID FLUORIDE, AMMONIUM BIFLUORIDE ACGIH TLV: 2.5 mg/m3 (TWA as Fluorine) OSHA PEL: 2.5 mg/M3 (Fluorides as F)	1341-49-7		98.0

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
+ indicates toxic chemical(s) subject to the reporting requirements of section 311 and 312 of Title III and of 40 CFR 372.
‡ Indicates a Chronic hazard. See warning (if applicable) in Section IX.
SEE SECTION XV FOR ADDITIONAL REGULATORY INFORMATION.

=====**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**=====

BOILING RANGE: 463 F SPECIFIC GRAVITY (H2O=1): 1.51
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
V.O.C. (less water): 0.00 lb/gl MATERIAL V.O.C. : 0.00 lb/gl
SOLUBILITY IN WATER: READILY SOLUBLE
APPEARANCE : White Flakes ODOR: PUNGENT ODOR

=====**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**=====

FLASHPOINT : N/A METHOD USED: SETAFLASH
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a UPPER: n/a

EXTINGUISHING MEDIA: Carbon Dioxide, dry chemical or foam. If water, fog nozzles preferred. This acid salt forms a very corrosive solution in water. Avoid flushing solution to sewer or stream.

SPECIAL FIREFIGHTING PROCEDURES

Water may be used to cool closed containers to prevent pressure build-up when exposed to extreme heat. Firefighting personnel should wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Thermal decomposition or exposure to acids may release toxic hydrogen fluoride gas.

=====**SECTION V - REACTIVITY DATA**=====

STABILITY: Stable
CONDITIONS TO AVOID

Avoid heat, moisture, and exposure to incompatible materials.

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INCOMPATIBILITY (MATERIALS TO AVOID)

Acids, alkalies, metals. Do not use glass containers.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Reacts violently with alkalies releasing ammonia. Forms hydrogen fluoride with concentrated acids. Evolves hydrogen gas on contact with non-noble metals (for example: Iron, Zinc, Aluminum, Etc.). **DO NOT USE GLASS CONTAINERS.**

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

----- SECTION VI - HEALTH HAZARD DATA -----

THRESHOLD LIMIT VALUE: SEE SECTION II

PRIMARY ROUTE(S) OF ENTRY:

Inhalation and skin contact.

EFFECTS OF OVEREXPOSURE:

SYMPTOMS OF INGESTION: TOXIC! CORROSIVE! Fluoride containing dust may cause a salty or soapy taste, vomiting, pain, diarrhea, weakness, loss of consciousness, and death. Kidney injury and stomach bleeding may occur.

SYMPTOMS OF INHALATION: CORROSIVE! Harmful to the mucous membranes. Causes irritation of the upper respiratory tract. Symptoms may include coughing, sore throat, lung congestion, and rapid breathing. Nasal perforation possible. Also see INGESTION.

SYMPTOMS OF SKIN CONTACT: CORROSIVE! May be harmful to the skin. May cause poisoning from absorption through injured skin. May cause irritation, redness, and pain. Also see INGESTION. Symptoms may be delayed.

SYMPTOMS OF EYE CONTACT: CORROSIVE! Harmful to the eyes. Causes irritation, redness, pain, discoloration, and may cause permanent damage. Also see INGESTION.

CHRONIC EXPOSURE: Prolonged or repeated skin exposure to fluoride containing dust may cause excessive calcification of bone, ligament of ribs, pelvis, and spinal column. May aggravate other pre-existing disorders, including diseases of the eye, skin, respiratory tract, central nervous system, skeletal system, and kidneys.

TOXICITY DATA: Inhalation:

LD50 1276 ppm/1hr (rat) corrosive

LC50 342 ppm/3hr (mouse) corrosive

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

See effects of overexposure.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Immediately flush with copious amounts of water for at least 15 minutes while holding eyelids apart. Washing within one minute is essential to achieve maximum effectiveness. Get medical attention after flushing.

SKIN CONTACT: Remove contaminated clothing immediately. Wash affected area thoroughly with water, then apply calcium gluconate gel to the affected area and rub in for at least 15 minutes. If possible apply a dressing soaked in 20% calcium gluconate solution and if burns cover more than the affected area of a hand, administer six effervescent calcium pills (400 mg calcium per pill) dissolved in water. Transport immediately for medical attention.

INHALATION: Remove to fresh air. Administer artificial respiration if not breathing or oxygen if breathing is difficult. Get prompt medical attention.

INGESTION: Never give anything by mouth to an unconscious person. **DO NOT INDUCE VOMITING.** Give two glasses of lime water, milk of magnesia, or milk if available. Administer calcium pills as described in skin contact section. Get medical treatment immediately.

Notes to physician: Take appropriate action to counteract symptoms.

----- SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE -----

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep, scoop, or pick up spilled material. Avoid dusting. Avoid using glass containers. Neutralize spill area with dry lime. Do not flush into sewer or stream.

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WASTE DISPOSAL METHOD

Disposal must be made in accordance with Local, State, and Federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep in tightly closed plastic, rubber, wood, or paraffined container. Store in a cool dry place and isolated from incompatible materials. Areas in which exposure to acid salts may occur should be clearly identified and access limited to authorized personnel.

OTHER PRECAUTIONS

Do not get in eyes. Avoid skin contact. Do not take internally. Wear protective clothing, gloves, and splash goggles or shield. Open containers carefully. Avoid breathing dust or mist. Use with adequate ventilation. Keep out of reach of children.

===== **SECTION VIII - CONTROL MEASURES** =====

RESPIRATORY PROTECTION

Observe the OSHA Respiratory Protection Standard (29 CFR 1910.134) for respirator selection and use. Selection of the most appropriate respirator will depend on the specific work environment and should be made only by a person familiar with the working conditions and with the benefits and limitations of respiratory protection products.

VENTILATION

Ventilation should dilute to below LEL and TLV to be considered adequate. All applications areas should be ventilated in accordance with the applicable regulations found in 29 CFR, Part 1910.

Respiratory protection should be provided in accordance with 29 CFR, Part 1910.134.

PROTECTIVE GLOVES

Recommended if skin contact is likely. Use rubber or gauntlet type neoprene impervious gloves.

EYE PROTECTION

Chemical goggles and/or face shield is recommended. Contact lenses should not be worn when working with this material. An eye wash station and quick-drench facilities should be maintained in the work area.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Use body covering, impervious clothing to reduce contact with material.

WORK/HYGIENIC PRACTICES

Wash hands with thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

===== **SECTION IX - REGULATORY AND ADDITIONAL HAZARDS INFORMATION** =====

AMMONIUM BIFLUORIDE - Prolonged or repeated exposure to fluoride containing dust may cause excessive calcification of bone, ligament or ribs, pelvis, and spinal column. May aggravate other pre-existing disorders, including diseases of the eye, skin, respiratory tract, central nervous system, skeletal system, and kidneys.

All components of this product are listed in the TSCA inventory.

Canadian (WHMIS) List: Ammonium Difluoride is listed on the DSL for disclosure at 1% or more.

WHMIS: E = Corrosive

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