



REC'D APR 23 2004

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Armand Products Company

469 North Harrison Street

Princeton, New Jersey 08543-5297

24 HOUR EMERGENCY TELEPHONE:

1-800-733-3665 or 1-972-404-3228 (U.S.);

32.3.575.55.55 (Europe);

1800-033-111 (Australia)

TO REQUEST AN MSDS:

1-866-295-5278 or 1-615-399-5148

CUSTOMER SERVICE:

1-800-522-0540 or 1-609-683-5900

MSDS NUMBER: M1252

SUBSTANCE: POTASSIUM CARBONATE (ANHYDROUS ALL GRADES)

TRADE NAMES:

Potassium Carbonate Extra Fine; Potassium Carbonate Glass; Potassium Carbonate Dense Granular; Potassium Carbonate Fine

SYNONYMS:

Potash; PotCarb; Pearlash

PRODUCT USE: glass manufacture, cleaner, process chemical

REVISION DATE: Jun 06 2003

Distributed By:
SAL Chemical
3036 Birch Drive
Weirton, WV 26062
304-748-8200

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: POTASSIUM CARBONATE

CAS NUMBER: 584-08-7

PERCENTAGE: 98.5-100

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0

HMIS RATINGS (SCALE 0-4): HEALTH=3 FLAMMABILITY=0 REACTIVITY=0

EMERGENCY OVERVIEW:**COLOR:** white**PHYSICAL FORM:** powder**ODOR:** odorless**MAJOR HEALTH HAZARDS:** MAY BE IRRITATING TO RESPIRATORY TRACT, SKIN, EYES, AND GASTROINTESTINAL TRACT. MAY CAUSE PERMANENT EYE DAMAGE.**POTENTIAL HEALTH EFFECTS:****INHALATION:****SHORT TERM EXPOSURE:** irritation**LONG TERM EXPOSURE:** to our knowledge, no effects are known**SKIN CONTACT:****SHORT TERM EXPOSURE:** irritation**LONG TERM EXPOSURE:** dermatitis**EYE CONTACT:****SHORT TERM EXPOSURE:** irritation**LONG TERM EXPOSURE:** irritation**INGESTION:****SHORT TERM EXPOSURE:** irritation**LONG TERM EXPOSURE:** to our knowledge, no effects are known**CARCINOGEN STATUS:****OSHA:** No**NTP:** No**IARC:** No**SECTION 4 FIRST AID MEASURES**

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Thoroughly clean and dry contaminated clothing before reuse. Destroy contaminated shoes. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT: Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. GET MEDICAL ATTENTION IMMEDIATELY.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material

or combustion by-products. Stay upwind and keep out of low areas.

SENSITIVITY TO MECHANICAL IMPACT: Not sensitive

SENSITIVITY TO STATIC DISCHARGE: Not sensitive

FLASH POINT: not flammable

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Shovel dry material into suitable container. Flush spill area with water, if appropriate. Reuse or recycle if possible. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Granular material is slightly hygroscopic; ground material is very hygroscopic. Store in a cool, dry place. Keep separated from incompatible substances.

HANDLING: Avoid breathing dust. Wash thoroughly after handling. When using, do not eat, drink or smoke. Do not reuse containers.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

POTASSIUM CARBONATE (ANHYDROUS ALL GRADES):

1 mg/m³ (recommended 8 hr(s) TWA (Internal Occupational Exposure Limit based on analogous chemicals).)

3 mg/m³ (recommended STEL (Internal Occupational Exposure Limit based on analogous chemicals).)

VENTILATION: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear chemical resistant safety goggles if eye contact is likely. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Wear long-sleeved work clothing to minimize skin contact.

GLOVES: Wear appropriate chemical resistant gloves.

PROTECTIVE MATERIAL TYPES: butyl rubber, natural rubber, neoprene, nitrile, Tyvek(R)

RESPIRATOR: A NIOSH approved respirator with N95 (dust, fume, mist) filters may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure.

A half facepiece air-purifying respirator may be used in concentrations up to 10X the acceptable exposure level and a full facepiece air-purifying respirator may be used in concentrations up to 50X the acceptable exposure level.

Supplied air should be used when the level is expected to be above 50X the acceptable level, or when there is a potential for uncontrolled release.

A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid

COLOR: white

TEXTURE: free-flowing, granular

PHYSICAL FORM: powder

ODOR: odorless

MOLECULAR WEIGHT: 138.21

MOLECULAR FORMULA: K₂CO₃

BOILING POINT: Not applicable

MELTING POINT: 1636 F (891 C)

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY (water=1): 2.428 @ 19 C

BULK DENSITY: 75-83 lbs/ft³ (granular); 35-39 lbs/ft³ (ground) @ 20 C

WATER SOLUBILITY: 100%

PH: moderately basic in solution

VOLATILITY: Not applicable

ODOR THRESHOLD: Not applicable

EVAPORATION RATE: Not applicable

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid contact with lime to prevent formation of corrosive potassium hydroxide (KOH).

INCOMPATIBILITIES: acids, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: oxides of carbon, oxides of potassium

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

POTASSIUM CARBONATE (ANHYDROUS ALL GRADES):

TOXICITY DATA:

1870 mg/kg oral-rat LD₅₀; >2000 mg/kg skin-rabbit LD₅₀; >4.96 mg/L inhalation-rat LC₅₀

ACUTE TOXICITY LEVEL:

Moderately Toxic: ingestion

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

POTASSIUM CARBONATE: May cause irritation and coughing.

CHRONIC EXPOSURE:

POTASSIUM CARBONATE: Irritation and cough.

SKIN CONTACT:

ACUTE EXPOSURE:

POTASSIUM CARBONATE: May cause irritation.

CHRONIC EXPOSURE:

POTASSIUM CARBONATE: Repeated or prolonged contact may cause dermatitis.

EYE CONTACT:

ACUTE EXPOSURE:

POTASSIUM CARBONATE: May cause irritation, that if untreated can be severe and permanent.

CHRONIC EXPOSURE:

POTASSIUM CARBONATE: Repeated or prolonged contact may cause conjunctivitis.

INGESTION:

ACUTE EXPOSURE:

POTASSIUM CARBONATE: May cause irritation and burning with pain from the mouth to the stomach. Massive overexposure may cause ulcerations, vomiting, and death from shock.

CHRONIC EXPOSURE:

POTASSIUM CARBONATE: No data available.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

FISH TOXICITY: 68 mg/L 96 hour(s) Rainbow trout LC50; 230 mg/L 96 hour(s) Bluegill sunfish LC50

FATE AND TRANSPORT:

BIODEGRADATION: This material is inorganic and not subject to biodegradation.

PERSISTENCE: This material is believed not to persist in the environment.

BIOCONCENTRATION: This material is believed not to bioaccumulate.

OTHER ECOLOGICAL INFORMATION: May increase pH of waterways and adversely effect aquatic life. 430 mg/L 48 hour(s) Daphnia magna EC50 (hard water). 200 mg/L 48 hour(s) Daphnia pulex EC50 (soft water).

SECTION 13 DISPOSAL CONSIDERATIONS

Reuse or reprocess if possible. Measure the pH of solutions to determine disposal restrictions. Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: Not regulated.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: Not regulated.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: Yes

CHRONIC: No

FIRE: No

REACTIVE: No

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated.

STATE REGULATIONS:

California Proposition 65: Not regulated.

**NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW:
REPORTING REQUIREMENT:**

POTASSIUM CARBONATE 584-08-7 98.5-100%

RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST:

Not regulated.

SPECIAL HEALTH HAZARD SUBSTANCE LIST:

Not regulated.

PENNSYLVANIA RIGHT TO KNOW:

REPORTING REQUIREMENT:

POTASSIUM CARBONATE 584-08-7 98.5-100%

HAZARDOUS SUBSTANCE LIST:

Not regulated.

ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST:

Not regulated.

SPECIAL HAZARDOUS SUBSTANCE LIST:

Not regulated.

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: D2B.

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): All the components of this substance are listed on or are exempt from the inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDL): All components of this product are listed on the DSL.

SECTION 16 OTHER INFORMATION

IMPORTANT: The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. **NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SUITABILITY, STABILITY OR OTHERWISE.** The information included herein is not intended to be all-inclusive as to the appropriate manner and/or conditions of use, handling and/or storage. Factors pertaining to certain conditions of storage, handling, or use of this product may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended to, and nothing herein shall be construed as a recommendation to, infringe any existing patents or violate any laws, rules, regulations or ordinances of any governmental entity.