

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE INHALATION.....: Potassium carbonate, potassium sulfite, and potassium bromide may cause irritation with symptoms of coughing, sore throat, and runny nose. Inhalation of diethylene glycol vapors is unlikely due to its low vapor pressure. However, if misted or handled at elevated temperatures, high concentrations of diethylene glycol can produce drowsiness, headache, dizziness, and nausea. Potassium sulfite may cause an allergic reaction in some asthmatics and sulfite sensitive individuals. Possible symptoms include bronchoconstriction, sweating, flushing, hives, rapid heart rate, decreased blood pressure, and anaphylaxis.

CHRONIC INHALATION.....: Prolonged inhalation of potassium bromide may cause skin eruptions.

ACUTE SKIN CONTACT.....: Potassium carbonate, potassium sulfite, and potassium bromide can be irritating to the skin with symptoms of reddening and itching. Prolonged skin contact with diethylene glycol may cause defatting of the skin which may result in irritation with symptoms of itching, drying and reddening.

CHRONIC SKIN CONTACT.....: Repeated or prolonged contact to sulfites may cause an allergic skin reaction in sensitive individuals.

ACUTE EYE CONTACT.....: Potassium carbonate, potassium sulfite and potassium bromide can be irritating to the eyes with symptoms of reddening, tearing, and stinging.

ACUTE INGESTION.....: Ingestion of this product may cause gastrointestinal irritation. Ingestion of diethylene glycol can result in behavioral change, drowsiness, kidney and liver failure, and coma. The oral toxicity of diethylene glycol is greater in humans than in laboratory animals. The estimated single lethal dose-oral-human is 1.0 ml/kg.

CARCINOGENICITY.....: The carcinogenicity classification for nitrilotriacetic acid/nitrilotriacetic acid sodium salts is based on findings of urinary tract tumors in rats and mice in chronic feeding studies.

NTP.....: This product contains Trisodium Nitrilotriacetate. Nitrilotriacetic acid is classified as an NTP Anticipated Human Carcinogen: "Substances or groups of substances, and medical treatments which may reasonably be anticipated to be carcinogens."

IARC.....: Nitrilotriacetic acid sodium salt is classified as an IARC possible human carcinogen (Group 2B): "The chemical or group of chemicals is possibly carcinogenic for humans."

OSHA.....: Not regulated

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE.....: Persons with preexisting eye or skin conditions or impaired pulmonary function may be more susceptible to the effects of this product.

4. FIRST AID MEASURES:

FIRST AID FOR EYES.....: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

FIRST AID FOR SKIN.....: Flush affected areas promptly with water and soap for 15 minutes. Remove contaminated clothing. In case of continued irritation consult physician.

FIRST AID FOR INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

FIRST AID FOR INGESTION.: If swallowed, rinse mouth with plenty of water, call a Physician.

5. FIRE FIGHTING MEASURES:

FLASH POINT.....: Noncombustible

EXTINGUISHING MEDIA.....: Material is not combustible. Use extinguishing media suitable for other combustible materials in the area.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES.....: Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up. Dike Spill. Prevent liquid from entering sewers, waterways or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Spill may be neutralized with powdered Citric Acid. For disposal see section 13.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE(MIN/MAX): Store between 40 F (4.4 C) and 80 F (26 C). Preferred storage is at 68 F (20 C).
SHELF LIFE.....: N.A.
SPECIAL SENSITIVITY.....: Keep from freezing.
HANDLING/STORAGE PRECAUTIONS: Avoid eye and skin contact, and store in well-ventilated area. Keep container tightly closed. Do not store with incompatible materials. Do not store or consume food, drink or tobacco in area where they may become contaminated with this material. For incompatibles see section 10.
OTHER NOTES.....: Keep out of the reach of children.

8. PERSONAL PROTECTION:

PROTECTIVE CLOTHING REQUIREMENTS...: Splash protection required for eyes, e.g., eye glasses with side shields or goggles. For skin protection use chemical resistant gloves and aprons, e.g. made of neoprene, rubber or vinyl.
VENTILATION REQUIREMENTS.....: Use sufficient general room ventilation and/or local exhaust to maintain airborne levels of vapors below applicable exposure limits (see Section 2).
RESPIRATOR REQUIREMENTS.....: Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1010.134.
ADDITIONAL PROTECTIVE MEASURES.....: Emergency showers and eye wash stations should be made available. Educate and train employees in the safe use and handling of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM.....: Liquid
APPEARANCE.....: Clear
COLOR.....: Colorless to yellowish
ODOR.....: Odorless
pH: 10.8
BOILING POINT.....: Greater than 212 F (100 C)
MELTING/FREEZING POINT....: Less than 32 F (0 C)
SOLUBILITY IN WATER: Soluble
SPECIFIC GRAVITY: 1.241 at 68 F (20 C)
BULK DENSITY.....: Not Applicable
VAPOR PRESSURE: Approx. 23 mbar at 68 F (20 C) (water)

10. STABILITY AND REACTIVITY:

STABILITY.....: This is a stable material.
HAZARDOUS POLYMERIZATION...: Will not occur.
INCOMPATIBILITIES.....: Strong Acids, oxidizers
INSTABILITY CONDITIONS.....: None known.
DECOMPOSITION PRODUCTS.....: In case of fire, oxides of sulfur, CO2, carbon monoxide and other potentially toxic fumes.

11. TOXICOLOGICAL INFORMATION:

TOXICITY DATA FOR: Potassium Carbonate
ACUTE TOXICITY
ORAL LD50.....: 1870 mg/kg (rat)
TOXICITY DATA FOR: Diethylene Glycol
ACUTE TOXICITY
ORAL LD50.....: 12565 mg/kg (rat)

12. ECOLOGICAL INFORMATION:

NO ECOLOGICAL INFORMATION AVAILABLE

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD.....: Recover nonusable free liquid and/or contaminated water, and dispose of in an approved and permitted treatment system. Remove nonusable solid material and/or contaminated soil, for disposal in an approved and permitted landfill. Discharge to sewer may require approval of permitting authority and may require pretreatment.

14. TRANSPORTATION INFORMATION:

TECHNICAL SHIPPING NAME.....: Aqueous Alkaline Photochemical Solution
PRODUCT LABEL.....: Neutol Plus

DOT (DOMESTIC SURFACE)

HAZARD CLASS OR DIVISION: Non-Regulated

IMO / IMDG CODE (OCEAN)

HAZARD CLASS DIVISION NUMBER...: Non-Regulated

ICAO / IATA (AIR)

HAZARD CLASS DIVISION NUMBER...: Non-Regulated

15. REGULATORY INFORMATION:

OSHA STATUS.....: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS.....: On TSCA Inventory

CERCLA REPORTABLE QUANTITY..: None

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES...: None

SECTION 311/312

HAZARD CATEGORIES.....: Immediate Health Hazard; Delayed Health Hazard

SECTION 313

TOXIC CHEMICALS.....: None

RCRA STATUS.....: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME /CAS NUMBER	CONCENTRATION	STATE CODE
Water 7732-18-5	60-80 %	PA3, NJ4
Sodium isoascorbate 6381-77-7	1-5 %	PA3, NJ4

COMPONENT NAME /CAS NUMBER	CONCENTRATION	STATE CODE
Potassium Carbonate 584-08-7	10-20 %	PA3, NJ4
Diethylene Glycol 111-46-6	1-5 %	PA1, NJ4
Isoscorbic acid sodium salt 7378-23-6	1-5 %	PA3, NJ4
Potassium Sulfite 10117-38-1	1-5 %	PA3, NJ4
Potassium Bromide 7758-02-3	1-5 %	PA3, NJ4

NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%
PA1 = Pennsylvania Hazardous Substance List
PA3 = Pennsylvania Non-hazardous present at 3% or greater.

16. OTHER INFORMATION:

HMIS RATINGS: Health Flammability Reactivity Personal Prot
 2 0 0 B
 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
 B=Safety Glasses, Gloves

AGFA's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS ratings are provided by AGFA as a customer service.

REASON FOR ISSUE.....: Revised section 2,3,15.
PREPARED BY.....: P. E. Malichky
APPROVED BY.....: Mike Patrick
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