

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.

ACUTE SKIN CONTACT.....: Product is not expected to be irritating to the skin (See Section 12). Skin sensitization with acetic acid is rare, but has been reported.

ACUTE EYE CONTACT.....: Acetic acid and potassium glutaraldehyde bisulfite may cause eye irritation with symptoms of stinging, tearing, and reddening.

ACUTE INGESTION.....: 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.

CHRONIC EFFECTS OF EXPOSURE...: No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

CARCINOGENICITY.....: The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE.....: Persons with preexisting eye, skin, liver, or kidney 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.....: Greater than 200 F (93 C)

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 Sodium Carbonate. 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
ODOR.....: Vinegar
pH: 2.7
BOILING POINT.....: Greater than 230 F (110 C)
MELTING/FREEZING POINT....: Not Established
SOLUBILITY IN WATER: Soluble
SPECIFIC GRAVITY: 1.12
BULK DENSITY.....: Not Established
VAPOR PRESSURE: Not Established

10. STABILITY AND REACTIVITY:

STABILITY.....: This is a stable material.
HAZARDOUS POLYMERIZATION...: Will not occur.
INCOMPATIBILITIES.....: Strong alkali, oxidizers, metals
INSTABILITY CONDITIONS.....: None known.
DECOMPOSITION PRODUCTS.....: In case of fire oxides of CO₂, carbon monoxide and other potentially toxic fumes can be generated due to thermal decomposition.

11. TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY
SKIN EFFECTS.....: non-irritating (rabbit) 4hr Draize (OECD 404)

TOXICITY DATA FOR: Diethylene Glycol
ACUTE TOXICITY
ORAL LD50.....: 12565 mg/kg (rat)
CHRONIC TOXICITY.....: This product contains diethylene glycol. Repeated ingestion of diethylene glycol over two years produced liver and kidney damage and bladder stones in laboratory rats.1

1 NIOSH-Registry of Toxic Effects of Chemical Substances

TOXICITY DATA FOR: Acetic Acid
ACUTE TOXICITY
ORAL LD50.....: 3310 mg/kg (rat)
DERMAL LD50.....: 1060 mg/kg (rabbit) (1)
INHALATION LC50....: LC50: 5620 ppm/1 hr. (mouse) (2)

1 Supplier Material Safety Data Sheet
2 Occupational Health Services Material Safety Data Sheet

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 Photochemical Solution
 PRODUCT LABEL.....: G-153 Developer/Replenisher Part B

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..: Acetic Acid (CAS# 64-19-7) 5,000 lbs.

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES...: None

SECTION 311/312

HAZARD CATEGORIES.....: Immediate 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
Acetic Acid 64-19-7	15-20 %	PA1, PA4, MA, NJ1, NJ3
Diethylene glycol 111-46-6	45-50 %	PA1, NJ4
Water 7732-18-5	25-30 %	PA3, NJ4
Potassium Glutaraldehyde Bisulfite 68310-08-7	5-10 %	PA3, NJ4

MA = Massachusetts Hazardous Substance List
NJ1 = New Jersey Hazardous Substance List
NJ3 = New Jersey Special Health Hazardous Substance List
NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%
PA1 = Pennsylvania Hazardous Substance List
PA3 = Pennsylvania Non-hazardous present at 3% or greater.
PA4 = Pennsylvania Environmental Hazardous Substance List.

16. OTHER INFORMATION:

HMIS RATINGS: Health Flammability Reactivity Personal Prot
 1 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.....: Update sections 3,12,14
PREPARED BY.....: P. E. Malichky
APPROVED BY.....: Mike Patrick
APPROVAL DATE.....: 11/13/2003
SUPERSEDES DATE.....: 03/20/2000
MSDS NUMBER.....: 34433

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