
MATERIAL SAFETY DATA SHEET

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Revised 2/02/04
Replaces 6/21/01
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AUTO-CHLOR SCALE AWAY**MSDS ID: A0061100**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: AUTO-CHLOR SCALE AWAY
Product Descriptor: DESCALER

MANUFACTURER:
AUTO CHLOR SYSTEM
746 POPLAR AVENUE
MEMPHIS, TN. 38105

EMERGENCY PHONE NUMBERS:
CUSTOMER SERVICE: (800)477-3693
MEDICAL (COLLECT): (303)592-1024
CHEMTREC: (800)424-9300

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
NITRIC ACID	7697-37-2	5 - 15%	TLV 5.2 STEL 10	MG/M3
PHOSPHORIC ACID	7664-38-2	15 - 30%	TWA 1 STEL 3	MG/M3

III. HAZARDS IDENTIFICATION

POSSIBLE ROUTES OF ENTRY: Eye contact. Skin contact. Inhalation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE: EYES: Corrosive. May cause permanent damage including blindness. SKIN: Corrosive. May cause permanent damage. INGESTION: Corrosive. May cause burns to mouth, throat and stomach. INHALATION: May cause irritation and corrosive effects to nose, throat and respiratory tract.

CHRONIC: Same as acute effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis or emphysema, etc., may be more susceptible to irritating effects.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes, skin, respiratory tract, and gastrointestinal tract.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with running water for at least 15 minutes keeping eyelids open. Get medical attention immediately.

SKIN: Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

INGESTION: Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

INHALATION: If breathing is affected, remove to fresh air. Get medical attention immediately.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): NONE

FLAME EXTENSION: N/A

FLAMMABLE LIMITS IN AIR BY VOLUME:

LEL: N/E

UEL: N/E

UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Toxic fumes or vapor may form during fire. Liquid produces hydrogen on contact with soft, active metals.

EXTINGUISHING MEDIA: Water spray, CO2, foam or dry powder.

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V. FIRE FIGHTING MEASURES (Cont.)

FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus SCBA) in fire area.

SPECIAL INSTRUCTIONS: Spilled product may cause slippery surface and fall hazard.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED: Contain spill. Wear protective clothing. Soak up or absorb liquid on suitable absorbent material. Collect and place in chemical waste container. Dispose of in accordance with local, State and Federal regulations. Flush spill area with water. This product does not contain a reportable quantity (RQ) under CERCLA.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL & INDUSTRIAL USE ONLY. Keep container tightly closed. Protect from freezing. Store in a dry, cool and well-ventilated area. KEEP OUT OF REACH OF CHILDREN.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Safety glasses with side shields. Eye wash in use area if contact or splash hazard exists.

PROTECTIVE GLOVES: Chemical resistant gloves. Includes: Neoprene gloves.

RESPIRATORY PROTECTION: If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

OTHER PROTECTIVE CLOTHING/EQUIPMENT: If major exposure is possible, wear suitable protective clothing and footwear.

ENGINEERING CONTROLS:

MECHANICAL VENTILATION: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear red liquid, acidic odor.

BOILING POINT (DEG F): 215

FREEZING POINT: <40

SPECIFIC GRAVITY/BULK DENSITY: 1.26

pH: 1

pH 1% SOLUTION: N/D

VOLATILE BY VOLUME: 59.5

WEIGHT % SOLIDS: 40.5

SOLUBILITY IN WATER: Soluble

VAPOR PRESSURE(mmHg): 17.5 at 20 C

VAPOR DENSITY: 17.3

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X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.

INCOMPATIBILITY WITH OTHER MATERIALS:

Alkalis; Soft metals; Chlorine and chlorinated compounds

HAZARDOUS DECOMPOSITION PRODUCTS:

Incomplete combustion forms; oxides of nitrogen; oxides of phosphorus

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

TOXICITY TEST DATA: Phosphoric Acid: Acute Oral LD50 (rat) - 1530 mg/kg
(RTECS) Acute Skin LD50 (rabbit) - 2740 mg/kg (RTECS)
Nitric Acid:
Acute Oral LDLO (man) - 430 mg/kg (MSI)

XII. ECOLOGICAL INFORMATION

ECOTOXICITY DATA: Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

ECOTOXICITY TEST DATA: Phosphoric Acid: TIm (48-96 hr.) (Gambusia
affinis) 138 mg/l

ECOTOXICITY TEST DATA: Nitric Acid: LC50 (48 hr.) (Carcinus
maena) 180 mg/l LC50 (48 hr.)
(Dinocardium robustum) 1000 mg/l LC50 (48 hr.)
(Asterias forbosi) 100-300 mg/l

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: Concentrated product is considered to be D002-Corrosive, if declared hazardous waste.

WASTE DISPOSAL METHOD: Spent or excess product is hazardous waste. Do not discharge to sewer or environment. Arrange disposal through a licensed disposal company or treat by special Waste Disposal Sheet. Recycle or dispose of containers by product labeling or governmental regulations.

XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

TSCA: All ingredients in this product are on TSCA inventory.

CERCLA/EPCRA:

Section 313 Toxic Chemicals: Product contains Nitric acid at 14% which is SA
LISTED CARCINOGEN: None

NTP: NO

IARC: NO

OSHA: NO

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XV. REGULATORY INFORMATION (Cont.)

HMIS RATINGS: HEALTH: 3 FIRE: 0 REACTIVITY: 0
PERSONAL PROTECTIVE EQUIPMENT: C
NFPA RATING: HEALTH: 3 FIRE: 0 REACTIVITY:0 SPECIAL:ACID
STATE RIGHT-TO-KNOW INFORMATION:
WATER - CAS #7732-18-5
PHOSPHORIC ACID - CAS #7664-38-2
NITRIC ACID - CAS# 7697-37-2
CALIFORNIA PROPOSITION 65:
None of the ingredients are on the California proposition 65 list.

XVI. OTHER INFORMATION

DISCLAIMER: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other materials or in a process. It is the user's responsibility to evaluate the handling, and use.