





255 Norman.
Lachine (Montreal), Que
H8R 1A3

Material Safety Data Sheet

EMERGENCY NUMBERS:

(USA) CHEMTREC : 1(800) 424-9300 (24hrs)
(CAN) CANUTEC : 1(613) 996-6666 (24hrs)
(USA) Anachemia : 1(518) 297-4444
(CAN) Anachemia : 1(514) 489-5711

WHMIS	Protective Clothing	TDG Road/Rail
WHMIS CLASS: D-2B		Not controlled under TDG (Canada). PIN: Not applicable. PG: Not applicable.
		

Section I. Product Identification and Uses

Product name	IONALL SOLUTION	CI#	Not available.
Chemical formula	Not applicable.	CAS#	Not applicable.
Synonyms	R-2960, 48915	Code	R-2960
Supplier	Anachemia Canada. 255 Norman. Lachine (Montreal), Que H8R 1A3	Formula weight	Not applicable.
		Supersedes	
Material uses	For laboratory use only.		

Section II. Ingredients

Name	CAS #	%	TLV
1) SODIUM CHLORIDE	7647-14-5	5-10	Not established by ACGIH
2) SODIUM ACETATE	6131-90-4	5-10	Not established by ACGIH
3) ACETIC ACID, GLACIAL	64-19-7	1-5	Exposure limits: ACGIH TWA 10 ppm (25 mg/m3); STEL 15 ppm (35 mg/m3)
4) 1,2-CYCLOHEXYLENE DINITRILLO TETRAACETIC ACID	482-54-2	0.1-1	Not established by ACGIH
5) WATER	7732-18-5	Balance	Not established by ACGIH

Toxicity values of the hazardous ingredients

SODIUM ACETATE:
ORAL (LD50): Acute: 3530 mg/kg (Rat). 6891 mg/kg (Mouse).
SODIUM CHLORIDE:
ORAL (LD50): Acute: 3000 mg/kg (Rat). 4000 mg/kg (Mouse).
INTRAPERITONEAL (LD50): Acute: 2602 mg/kg (Mouse).
INTRAVENOUS (LD50): Acute: 645 mg/kg (Mouse).
ACETIC ACID, GLACIAL:
ORAL (LD50): Acute: 3310 mg/kg (Rat).
DERMAL (LD50): Acute: 1060 ul/kg (Rabbit).
VAPOR (LC50): Acute: 5620 ppm (Mouse) (1 hour(s)).
UNREPORTED (LDLo): Acute: 308 mg/kg (Man).
INTRAVENOUS (LD50): Acute: 525 mg/kg (Mouse).
1,2-CYCLOHEXYLENE DINITRILLO TETRAACETIC ACID:
INTRAPERITONEAL (LD50): Acute: 413 mg/kg (Rat). 150 mg/kg (Mouse).

Section III. Physical Data

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Physical state and appearance / Odor	Colorless liquid. Acetic acid odor.
pH (1% soln/water)	Not available.
Odor threshold	Not available.
Percent volatile	Not available.
Freezing point	Not available.
Boiling point	Not available.
Specific gravity	>1 (Water = 1)
Vapor density	Not available.
Vapor pressure	Not available.
Water/oil dist. coeff.	Not available.
Evaporation rate	Not available.
Solubility	Miscible in water.

Section IV. Fire and Explosion Data

Flash point	Not available.
Flammable limits	Not available.
Auto-ignition temperature	Not available.
Fire degradation products	Oxides of carbon, sodium, and nitrogen. Hydrogen chloride.
Fire extinguishing procedures	Use DRY chemical, carbon dioxide, alcohol-resistant foam or water spray. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Cool containing vessels with flooding quantities of water.
Fire and Explosion Hazards	The sensitivity to static discharge is not available. The sensitivity to impact is not available. Emits toxic fumes under fire conditions.

Section V. Toxicological Properties

Routes of entry	Ingestion and inhalation. Eye contact. Skin contact. Skin absorption.
Effects of Acute Exposure	Harmful by inhalation, in contact with skin and if swallowed. Target organs: eyes, skin, respiratory system, teeth.
Eye	Causes irritation.
Skin	Repeated or prolonged skin contact may cause irritation.
Inhalation	Material is irritating to mucous membranes and upper respiratory tract. May cause central nervous system depression (e.g., headache, nausea, vomiting), coughing, dyspnea, thoracic pain, bronchopneumonia, chemical pneumonitis, pulmonary edema.
Ingestion	Causes gastrointestinal irritation. May cause nausea, diarrhea, abdominal pain, hematemesis, albuminuria, hemolysis, hemoglobinuria, anuria, uremia, kidney damage, shock, coma and possibly death.

Section V. Toxicological Properties

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Effects of Chronic Overexposure

Conjunctivitis, dark coloration of the skin, dermatitis, dental erosion, pharyngitis, bronchitis, hyperkeratosis, pyrosis, constipation, kidney damage. May cause allergic skin reaction. Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available. Toxicity of the product to the reproductive system: Not available. To the best of our knowledge, the chemical, physical, and toxicity of this substance has not been fully investigated.

Section VI. First Aid Measures

Eye contact

Immediately flush eyes with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Call a physician.

Skin contact

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If irritation occurs or persists seek medical attention. Wash contaminated clothing before reusing.

Inhalation

Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician.

Ingestion

If conscious, wash out mouth with water. Have conscious person drink several glasses of water to dilute. DO NOT induce vomiting. Keep patient warm and quiet. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water.

Section VII. Reactivity Data

Stability

Stable. Conditions to avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination.

Hazardous decomp. products

Not available.

Incompatibility

Reacts with most common metals to produce hydrogen. May react violently with: oxidizing agents, amines, bases, chromic acid, nitric acid, sodium peroxide, alcohols, alkalies, peroxides, perchloric acid, sulfides, cyanides, carbonates, chlorosulfonic acid, 2-aminoethanol, bromine pentafluoride, phosphorus trichloride, acetaldehyde, acetic anhydride, potassium tert-butoxide, permanganates, n-xylene, oleum, phosphorus isocyanate, oxides, hydrides, water reactive materials.

Reaction Products

Corrosive to metals. Hazardous polymerization will not occur.

Section VIII. Preventive Measures

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Protective Clothing in case of spill and leak

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

Spill and leak

Absorb on sand or vermiculite and place in a closed container for disposal. Ventilate area and wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch spilled material.

Waste disposal

According to all applicable regulations.

Storage and Handling

Store in a cool place away from heated areas, sparks, and flame. Store in a well ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep container tightly closed and dry. Manipulate in a well ventilated area or under an adequate fume hood. Empty containers may contain a hazardous residue. Handle and open container with care. Take off immediately all contaminated clothing. This product must be manipulated by qualified personnel. Do not get in eyes, on skin, or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling.

Section IX. Protective Measures

Protective clothing

Splash goggles. Impervious gloves, apron, coveralls, and/or other resistant protective clothing. Sufficient to protect skin. A OSHA/MSHA jointly approved respirator is advised in the absence of proper environmental controls. If more than TLV, do not breathe vapor. Wear self-contained breathing apparatus. Do not wear contact lenses. Make eye bath and emergency shower available. Ensure that eyewash station and safety shower is proximal to the work-station location.

Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Do not use in unventilated spaces.

Section X. Other Information

Special Precautions or comments

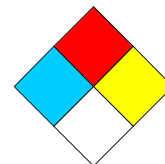
Irritant! Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Manipulate in a well ventilated area or under an adequate fume hood. To the best of our knowledge, the chemical, physical and toxicity of this substance has not been fully investigated. Handle and open container with care. Container should be opened only by a technically qualified person.

RTECS NO: AF1225000 (Acetic acid, glacial).

RTECS NO: VZ4725000 (Sodium chloride).

RTECS NO: AJ4375000 (Sodium acetate).

RTECS NO: AG5000000 (1,2-Cyclohexylene dinitrilo tetraacetic acid).



NFPA

Prepared by MSDS Department/Département de F.S..

Validated 08-Feb-2010



While the company believes the data set forth herein are accurate as of the date hereof, the company makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.