

**WARDS NATURAL SCIENCE ESTABLISHMENT INC -- IODINE
SOLUTION FOR GRAMS STAIN --**

===== Product Identification =====

Product ID: IODINE SOLUTION FOR GRAMS STAIN
MSDS Date: 04/05/1995
FSC: NIIN: Submitter: D DG
Status Code: A
MSDS Number: CKGLB
=== Responsible Party ===
Company Name: WARDS NATURAL SCIENCE ESTABLISHMENT INC
Address: 5100 W HENRIETTA RD
City: ROCHESTER
State: NY
ZIP: 14692
Country: US
Info Phone Num: (716) 359-2502 OR 800-962-2660
Emergency Phone Num: 716-226-6177
Resp. Party Other MSDS Num.: IX 180
Preparer's Name: MICHAEL RASZEJA
Chemtrec Ind/Phone: (800) 424-9300
CAGE: 63759
=== Contractor Identification ===
Company Name: WARDS NATURAL SCIENCE ESTABLISHMENT INC
Address: 5100 W HENRIETTA RD
Box: 92912
City: ROCHESTER
State: NY
ZIP: 14692-9012
Country: US
Phone: (716) 359-2502
CAGE: 63759

===== Composition/Information on Ingredients =====

Ingred Name: IODINE
CAS: 7553-56-2
RTECS #: NN1575000
= Wt: 2.
OSHA PEL: C1 MG/M3; C0.1 PPM
ACGIH STEL: C1.0 MG/M3; C0.1 PPM

Ingred Name: POTASSIUM IODIDE
CAS: 7681-11-0
RTECS #: TT2975000
= Wt: 3.

Ingred Name: WATER
CAS: 7732-18-5
RTECS #: ZC0110000
= Wt: 95.

===== Hazards Identification =====

Effects of Overexposure: CONTACT AS FUMES OR SOLUTION IS INTENSELY
IRRITATING TO EYES, SKIN AND MUCOUS MEMBRANES. MAY CAUSE DELAYED

LUNG INJURY. INGESTION: OF LARGE QUANTITIES CAUSES ABDOMINAL PAIN, VOMITING AND DIARRHEA. IN SEVERE CAUSES PURGING, EXCESSIVE THIRST AND CIRCULATORY FAILURE MAY DEVELOP.

===== First Aid Measures =====

First Aid:INGESTION: IF SWALLOWED, IF CONSCIOUS, GIVE ONE OR TWO GLASSES OF MILK, FOLLOWED BY A STARCH, FLOUR OR EGG WHITE, AS A SOLUTION. GET IMMEDIATE MEDICAL ATTENTION. EYES: IN CASE OF CONTACT, FLUSH EYES THOROUGHLY WITH WATER, HOLDING EYELIDS OPEN, FLUSH THOROUGHLY WITH WATER. GET IMMEDIATE MEDICAL ATTENTION. INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION. SKIN:FLUSH THOROUGHLY WITH WATER.

===== Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE
Extinguishing Media:USE ANY MEDIA SUITABLE FOR EXTINGUISHING SUPPORTING FIRE.
Fire Fighting Procedures:IN FIRE CONDITIONS, WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE FLOODING AMOUNTS OF WATER IN EARLY STAGES OF FIRE.
Unusual Fire/Explosion Hazard:WHEN HEATED, EMITS TOXIC AND CORROSIVE, VIOLENT IN COLOR, FUMES OF IODINE. IODINE IS CORROSIVE TO METALS AND TO ALL BODY TISSUE.

===== Accidental Release Measures =====

Spill Release Procedures:ABSORB SPILL ON VERMICULITE, SAND, EARTH, PAPER TOWEL & PLACE IN A SUITABLE CONTAINER FOR DISPOSAL. WASH FLOOR OR SPILL AREA WITH A 5-10% SODIUM THIOSULFATE SOLUTION.

===== Handling and Storage =====

Handling and Storage Precautions:DISPOSAL- SLOWLY ADD, WHILE STIRRING SODA ASH OR SODIUM THIOSULFATE TILL ALL OF THE IODINE HAS BEEN DISSOLVED & SOLUTION IS COLORLESS. FLUSH TO SEWER WITH COPIOUS AMOUNTS OF WATER. STORAGE-STORE IN A COOL, DRY, WELL-VENTILATED AREA. REMOVE ALL CONTAMINATED CLOTHING & SHOES. KEEP CONTAINER CLOSED.

Other Precautions:READ LABEL BEFORE USING. DO NOT WEAR CONTACT LENSES WHEN WORKING WITH CHEMICALS. AVOID CONTACT WITH SKIN & EYES. CONTACT WITH SKIN WILL LEAVE YELLOW IODINE STAIN. FOR LABORATORY USE ONLY. NOT FOR DRUG, HOUSEHOLD, OR FOOD USE. KEEP OUT OF REACH OF CHILDREN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE SHOULD BE NEEDED IN NORMAL LABORATORY HANDLING AT ROOM TEMPERATURE. IF NEEDED, WORK IN A FUME HOOD.

Ventilation:LOCAL EXHAUST: RECOMMENDED. MECHANICAL(GENERAL): RECOMMENDED.

Protective Gloves:RUBBER .

Eye Protection:CHEMICAL SAFETY GLASSES.

Other Protective Equipment:SMOCK, APRON, EYE WASH STATION, GOGGLES, VENTILATION HOOD, PROPER GLOVES.

Work Hygienic Practices:WASH BEFORE RESUE. WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:N1

Boiling Pt:=100.C, 212.F

Melt/Freeze Pt:=0.C, 32.F

Vapor Pres:IODINE 1 MM @38.7C

Vapor Density:0.7 (WATER

Spec Gravity:1

Evaporation Rate & Reference:GREATER THAN 1 (ETHER=1)

Appearance and Odor:DEEP AMBER COLOR LIQUID, IODINE ODOR.

Percent Volatiles by Volume:95

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

CONTACT OF GASEOUS AMMONIA OR ITS SOLUTIONS WITH FREE IODINE SHOULD BE AVOIDED TO PREVENT THE FORMATION OF THE EXPLOSIVE "NITROGEN IODIDE". ACETALDEHYDE, SODIUM AZIDE, SODIUM HYDROXIDE.

Stability Condition to Avoid:EXCESSIVE TEMPERATURE OR HEAT.

Hazardous Decomposition Products:FREE IODINE.

===== Toxicological Information =====

Toxicological Information:THRESHOLD LIMITED VALUE: NONE ESTABLISHED FOR THIS SOLUTION. (ACGIH 1983-94). TOXICITY: ORAL-HUMAN. TWA: AS IODINE (CEILING LIMIT) 0.1 PPM; 1 MG/M3 (AIR) LDLO: 2000 MG/KG.

===== Disposal Considerations =====

Waste Disposal Methods:DISCHARGE,TREATMENT,OR DISPOSAL MAY BE SUBJECT TO FEDERAL, STATE OR LOCAL LAWS.THESE DISPOSAL GUIDE LINES ARE INTENDED FOR CATALOG-SIZE QUANTITIES ONLY. WORK IN A VENTILATION HOOD & WEARING PROPER SAFETY EQUIPMENT, COLLECT WASTE IODINE IN A LARGE BEAKER. COVER WITH A LARGE VOLUME OF WATER.

===== MSDS Transport Information =====

Transport Information:DOT: NON-REGULATED.

===== Other Information =====

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