



Material Safety Data Sheet

Iodine-bromine, Hanus

Section 1 - Chemical Product and Company Identification

MSDS Name:

Iodine-bromine, Hanus

Catalog Numbers:

LC15670

Synonyms:

Iodine-bromine, Hanus, AOAC

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
64-19-7	Acetic acid	balance
7553-56-2	Iodine	1.32
7726-95-6	bromine	0.6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Darkamber

Warning! Irritant. Corrosive. May cause severe eye and skin irritation with possible burns.

Use only with adequate ventilation or respiratory protection. Flash Point: 104°F.

Target Organs: Noneknown.

Potential Health Effects

Eye:

Eyecontactmayresultinswelling,irritation,damagetothecorneaandconjunctivareresultinginblurredorpartialloss of vision.

Skin:

Skincontactmayresultinirritation,pain,burns,blisters,andbrownoryellowstains.



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Ingestion:

Ingestion may result in severe burns of the mouth, throat, and stomach; vomiting and diarrhea of dark blood.

Inhalation:

Respiratory irritation, coughing, choking, headache, dizziness, weakness can occur. Exposure to 50 ppm acetic acid is intolerable for most individuals. Delayed symptoms include lung fluid, chest pain, frothy sputum, cyanosis, rales and hypotension.

Chronic:

Chronic exposure can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, laryngitis, bronchitis, stomatitis, and skin rashes. Use of iodides in pregnant asthmatics has resulted in fetal death, severe goiter and cretinoid appearance of the newborn. Acetic acid sensitization dermatitis from prolonged exposure can occur. Prolonged exposure to acetic acid may result in tooth discoloration, enamel erosion, jaw necrosis, nasal ulceration, laryngitis, pneumonia, bronchitis, coughing, gastrointestinal disturbances.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion:

Get medical aid at once. Give conscious victim large quantities of water to dilute acid. Give oxygen if respiration is depressed. Induce vomiting (touch finger to back of throat) keeping head lower than hips (prevent aspiration into lungs).

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Avoid breathing corrosive vapors, knock down with water spray. Vapors heavier than air, may travel considerable distance and flash back from source of ignition. Keep out of sewers and drains. Vapor-air mixtures explosive. Move container if possible, cool with water - don't get water inside container.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

104°F (40.00°C)

NFPA Rating:

CAS # 64-19-7 health-3; flammability-2; reactivity-0
CAS# 7553-56-2: Not published.



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CAS# 7726-95-6: Not published.

Explosion Limits:

Lower: Upper:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Caustic soda may be used to neutralize. Isolate, ventilate spill area.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing dust, vapor, mist, or gas. Keep out of sewers and drains.

Storage:

Keep from contact with oxidizing materials. Store capped at room temperature. Store in acid containment area, protected from heat and ignition source. Protect from heat and incompatibles. Vapors heavier than air, may travel considerable distance and ignite or explode.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Local exhaust may be necessary to control concentrations to acceptable levels.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Acetic acid	10 ppm TWA; 15 ppm STEL	10 ppm TWA; 25 mg/m ³ TWA	10 ppm TWA; 25 mg/m ³ TWA;
Iodine	None of the components are on this list.	None of the components are on this list.	C 0.1 ppm; C 1 mg/m ³ ;
Bromine	0.1 ppm TWA; 0.2 ppm STEL	0.1 ppm TWA; 0.7 mg/m ³ TWA	0.1 ppm TWA; 0.7 mg/m ³ TWA;

OSHA Vacated PELs

Acetic acid: 10 ppm TWA; 25 mg/m³ TWA
Acetic acid: 10 ppm TWA; 25 mg/m³ TWA
bromine: 0.1 ppm TWA; 0.7 mg/m³ TWA

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear acid protective clothing and gloves.



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Clothing:

Wear acid protective clothing and gloves.

Respirators:

>100ppm- SCBAF:PD,PP;SAF:PD,PP,CF.

500ppm- CCROVF/GMOV/SAF/SCBAF.

1000ppm- SAF:PD,PP,CF. Escape-

GMOV/SCBA. Firefighting- SCBAF:PD,PP. Firefighting-SCBAF:PD,PP. (Respirator Codes: DHEW (NIOSH) Publication No. 78-210)

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Dark amber

Odor: Pungent vinegar-like odor

pH: Acidic

Vapor Pressure: No information found.

Vapor Density: No information found.

Evaporation Rate: No information found.

Viscosity: No information found.

Boiling Point: No information found.

Freezing/Melting Point: No information found.

Decomposition Temperature: No information found.

Solubility in water: Miscible.

Specific Gravity/Density: No information found.

Molecular Formula: No information found.

Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. Slight fumes of iodine and bromine may be given off.

Conditions to Avoid:

Incompatible materials, metals, oxidizers.

Incompatibilities with Other Materials

Bromine pentafluoride, chlorine trifluoride, chromic acid, chromic anhydride, diallyl methyl carbinol and ozone, nitric acid and acetone, perchloric acid, permanganates, phosphorous trioxide, sodium peroxide, m-xylene, azidotetrazole, phosphorus isocyanate, potassium hydroxide, acetic anhydride, hydrogen peroxides.

Hazardous Decomposition Products

Oxides of carbon, iodine, bromine.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 64-19-7: AF1225000.



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CAS# 7553-56-2: NN1575000.

CAS# 7726-95-6: EF9100000.

LD50/LC50:

CAS# 64-19-7:

Inhalation, mouse: LC50 = 5620 ppm/1H

Oral, rat: LD50 = 3310 mg/kg

Skin, rabbit: LD50 = 1060 mg/kg.

CAS# 7553-56-2:

Oral, mouse: LD50 = 22 gm/kg

Oral, rabbit: LD50 = 10 gm/kg

Oral, rat: LD50 = 14 gm/kg.

CAS# 7726-95-6:

Inhalation, mouse: LC50 = 750 ppm/9M

Inhalation, rat: LC50 = 2700 mg/m³

Oral, mouse: LD50 = 3100 mg/kg

Oral, rabbit: LD50 = 4160 mg/kg

Oral, rat: LD50 = 2600 mg/kg.

Carcinogenicity:

CAS# 64-19-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7553-56-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7726-95-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Severe eye, mucous membrane and skin irritant, skin sensitizer.

Teratogenicity:

Reproductive:

Mutagenicity:

Neurotoxicity:

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Corrosive liquid, toxic, n.o.s.
(Acetic acid, Bromine)

Hazard Class: 8

UN Number: UN2922

Packing Group: PGI



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Section 15 - Regulatory Information

US Federal

TSCA

CAS#64-19-7 is listed on the TSCA Inventory.
CAS#7553-56-2 is listed on the TSCA Inventory.
CAS#7726-95-6 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

CAS#64-19-7: final RQ = 5000 pounds (2270 kg)

CERCLA/SARA Section 313

Bromine is not at a high enough concentration to be reportable under Section 313.

OSHA - Highly Hazardous

CAS#7726-95-6 is considered highly hazardous by OSHA.

US State

State Right to Know

Acetic acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

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California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 64-19-7 is listed on Canada's DSL List.
CAS# 7553-56-2 is listed on Canada's DSL List.
CAS# 7726-95-6 is listed on Canada's DSL List.

Canada Ingredient Disclosure List

CAS# 64-19-7 is listed on Canada's Ingredient Disclosure List.
CAS# 7553-56-2 is listed on Canada's Ingredient Disclosure List.
CAS# 7726-95-6 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: May 27, 1998

Revision Date: September 7, 2007

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