



MATERIAL SAFETY DATA SHEET
Iodine solution, 1% w/v in potassium iodide

Section 1 - Chemical Product and Company Identification

MSDS Name: Iodine solution, 1% w/v in potassium iodide
Catalog Numbers: J/4450/15, J/4450/17
Synonyms: None
Company Identification: Fisher Scientific UK
 Bishop Meadow Road, Loughborough
 Leics. LE11 5RG
For information in Europe, call: (01509) 231166
Emergency Number, Europe: 01509 231166

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
7553-56-2	Iodine	1.0%	231-442-4		
7681-11-0	Potassium iodide	2.5%	231-659-4		
7732-18-5	Water	96.5%	231-791-2		

Text for R-phrases: see Section 16

Hazard Symbols: None listed

Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available

Potential Health Effects

Eye: May cause eye irritation.

Skin: Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation.

Chronic: Chronic exposure can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, laryngitis, bronchitis, stomatitis, and skin rashes. May cause reproductive and fetal effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to

Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Wash area with soap and water. Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

CAS# 7553-56-2:

United Kingdom, WEL - STEL: 0.1 ppm STEL; 1.1 mg/m³ STEL
United States OSHA: ; 0.1 ppm Ceiling; 1 mg/m³ Ceiling
Belgium - TWA: 0.1 ppm VLE; 1 mg/m³ VLE
France - VLE: 0.1 ppm VLE; 1 mg/m³ VLE
Germany: 0.1 ppm TWA; 1.1 mg/m³ TWA Germany: Skin absorber
Japan: 0.1 ppm OEL; 1 mg/m³ OEL
Malaysia: 0.1 ppm Ceiling; 1.0 mg/m³ Ceiling
Russia: 1 mg/m³ TWA
Spain: 0.1 ppm VLA-EC; 1 mg/m³ VLA-EC

CAS# 7681-11-0:

CAS# 7732-18-5:

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: dark amber
Odor: Iodine-like odor.
pH: Not available
Vapor Pressure: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Autoignition Temperature: Not available.
Flash Point: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature: Not available
Solubility in water: Miscible with water.
Specific Gravity/Density: Not available.
Molecular Formula: Mixture
Molecular Weight: 0

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials Not available
Hazardous Decomposition Products Oxides of potassium, iodide ions (I-).
Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 7553-56-2: NN1575000
CAS# 7681-11-0: TT2975000
CAS# 7732-18-5: ZC0110000

LD50/LC50: RTECS:
CAS# 7553-56-2: Oral, mouse: LD50 = 22 gm/kg;
Oral, mouse: LD50 = 1000 mg/kg;
Oral, rabbit: LD50 = 10 gm/kg;
Oral, rat: LD50 = 14 gm/kg;
.
RTECS:
CAS# 7681-11-0:
RTECS:
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
.

Carcinogenicity: Iodine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Potassium iodide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not regulated as a hazardous material	Not regulated as a hazardous material	Not regulated as a hazardous material
Hazard Class:			
UN Number:			
Packing Group:			

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7553-56-2: 1

CAS# 7681-11-0: 1

CAS# 7732-18-5: Not available

Canada

CAS# 7553-56-2 is listed on Canada's DSL List

CAS# 7681-11-0 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7553-56-2 is listed on the TSCA Inventory.

CAS# 7681-11-0 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

Section 16 - Other Information

Text for R-phrases from Section 2

MSDS Creation Date: 12/12/1997

Revision #3 Date 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
