



Alpha Chemika



ISO 9001 QUALITY SYSTEM CERTIFIED ORGANIZATION

MATERIAL SAFETY DATA SHEET

MSDS

Savgan Heights ; 102 ,B Wing ; R.T.O. Lane ,Andheri (West) Mumbai - 400053 , INDIA

Section 1 - Chemical Product and Company Identification

Product Name : **IODINE N/10 SOLUTION**

Synonyms: Iodine 0.01 Normal (N/10) Volumetric Solution; Iodine 0.0282 Normal Volumetric Solution

CAS No.: Not applicable to mixtures.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: I₂

Section 2 - Composition, Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Iodine	7553-56-2	0.1 - 0.4%	No
Potassium Iodide	7681-11-0	< 1%	No
Water	7732-18-5	> 99%	No

Section 3 - Hazardous Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 0 - None

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

No adverse health effects expected from inhalation.

Ingestion:

Large doses may cause gastro-intestinal upset.

Skin Contact:

No adverse effects expected.

Eye Contact:

No adverse effects expected.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

Section 4 - First Aid Measures

Inhalation:

Not expected to require first aid measures.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

Section 5 - Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6 - Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

Section 7 - Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Protect from freezing. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Section 8 - Exposure Controls, Personal Protection

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):

0.1 ppm Ceiling

-ACGIH Threshold Limit Value (TLV):

0.01 ppm (TWA) inhalable fraction and vapor for Iodine and Iodides.

0.1 ppm (STEL) vapor and aerosol for Iodine.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airtight hood, or full-facepiece self-contained breathing apparatus. This substance has unknown warning properties.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical and Chemical Properties

Appearance:

Clear, reddish brown liquid.

Odor: Iodine

odor. **Solubility:**

Infinitely soluble.

Specific Gravity:

1.01

pH:

No information found.

% Volatiles by volume @ 21C (70F):

> 90 (as water)

Boiling Point:

ca. 100C (ca. 212F)

Melting Point:

ca. 0C (ca. 32F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

Section 10 - Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce toxic iodine vapors.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

None found.

Conditions to Avoid:
No information found.

Section 11 - Toxicological Information

For Iodine: Oral rat LD50: 14 gm/kg; Human LDLO: 28 mg/kg; Investigated as a reproductive effector.
Potassium iodide: investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----
---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Iodine (7553-56-2)	No	No	None
Potassium Iodide (7681-11-0)	No	No	None
Water (7732-18-5)	No	No	None

Section 12 - Ecological Information

Environmental Fate: No information found.

Environmental Toxicity:
No information found.

Section 13 - Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14 - Transport Information

Not Regulated

Section 15 - Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Iodine (7553-56-2)	Yes	Yes	No	Yes
Potassium Iodide (7681-11-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----
--Canada--

Ingredient	Korea	DSL	NDSL	Phil.
Iodine (7553-56-2)	Yes	Yes	No	Yes
Potassium Iodide (7681-11-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----
-SARA 302- -----SARA 313-----

Ingredient	RQ	TPQ	List	Chemical Catg.
Iodine (7553-56-2)	No	No	No	No

Potassium Iodide (7681-11-0)	No	No	No	No
Water (7732-18-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	-RCRA-		-TSCA-	
	CERCLA	261.33	8(d)	
Iodine (7553-56-2)	No	No	No	
Potassium Iodide (7681-11-0)	No	No	No	No
Water (7732-18-5)	No	No	No	

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes
 SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No
 Reactivity: No (Mixture / Liquid)

Section 16 - Additional Information

NFPA Ratings: Health: **0** Flammability: **0** Reactivity: **0**

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Industrial chemical.

Revision Information:

MSDS Section(s) changed since last revision of document include: 8.