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# BROUWLAND



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## Safety data sheet VINOFORM® IODIC SOLUTION

### **SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MSDS Name : VINOFORM® IODIC SOLUTION  
Catalog Numbers : 013.056.7  
Synonyms: None known.  
Company Identification: BROUWLAND  
Korspelsesteenweg 86  
B-3581 Beverlo - Belgium  
For information, call: +32(0)11-40.14.08  
Emergency Number: +32(0)11-40.14.08

### **SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS #	Chemical name	%	EINECS #
1310-58-3	Potassium hydroxide	0.5-2.0	215-181-3
7681-11-0	Potassium iodide	< 0.1%	231-659-4
7732-18-5	Water	balance	231-791-2

Hazard Symbols: C  
Risk Phrases: 22 35

### **SECTION 3 - HAZARDS IDENTIFICATION**

#### EMERGENCY OVERVIEW

Appearance: colourless.

Danger ! Causes skin burns. Causes eye burns. Causes digestive tract burns. Causes respiratory tract burns.  
Corrosive. Harmful if swallowed.

Target Organs : Respiratory system, eyes, skin.

#### Potential Health Effects

Eye: Causes severe eye burns. May cause irreversible eye injury.  
Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed.

Skin: Causes skin burns. May cause deep, penetrating ulcers of the skin.

Ingestion: Harmful if swallowed. May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death

Inhalation: Irritation may lead to chemical pneumonitis and pulmonary edema.  
Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

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## **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 :	Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure.
Ingestion :	Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation :	Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician :	Treat symptomatically and
Antidote :	None reported.

## **SECTION 5 - FIRE FIGHTING MEASURES**

General Information :	Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials.
Extinguishing Media :	For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Autoignition Temperature: Not applicable.
Flash Point :	59 deg F ( 15.00 deg C)
Explosion Limits, lower :	Not available.
Explosion Limits, upper :	Not available.
NFPA Rating :	(estimated) Health: 3; Flammability: 0; Reactivity: 0

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

General Information :	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks :	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Neutralize spill with a weak acid such as vinegar or acetic acid. Avoid runoff into storm sewers and ditches which lead to waterways.

## **SECTION 7 - HANDLING and STORAGE**

Handling :	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not allow water to get into the container because of violent reaction. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.
Storage :	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids

## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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Exposure Limits			
Chemical name	ACGIH	NIOSH	OSHA-Final PELs
Potassium hydroxide	C 2 mg/m <sup>3</sup>	non listed	non listed
Potassium iodide	non listed	non listed	non listed
Water	non listed	non listed	non listed

OSHA Vacated PELs :

Potassium hydroxide : C 2 mg/m<sup>3</sup>

Water :

No OSHA Vacated PELs are listed for this chemical.

Potassium Iodide : no OSHA Vacated PELs are listed for this chemical

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 gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State :	Liquid
Appearance :	brown
Odor :	none reported
pH :	13.2-13.5
Vapor Pressure :	Not available.
Vapor Density :	Not available.
Evaporation Rate :	Not available.
Viscosity :	Not available.
Boiling Point :	Not available.
Freezing/Melting Point :	Not available.
Decomposition Temperature :	Not available.
Solubility in water :	Completely soluble in water.
Specific Gravity/Density :	1.3
Molecular Formula :	Mixture
Molecular Weight :	0

## **SECTION 10 - STABILITY AND REACTIVITY**

- Chemical Stability : Stable at room temperature in closed containers under normal storage and handling conditions.
- Conditions to Avoid : Incompatible materials, acids, metals.
- Incompatibilities with Other Materials : Potassium hydroxide reacts with chlorine dioxide, nitrobenzene, nitromethane, nitrogen trichloride, peroxidized tetrahydrofuran, 2,4,6-trinitrotoluene, bromoform+ crown ethers, acids alcohols, sugars, germanium cyclopentadiene, maleic dicarbide. Corrosive to metals such as aluminum, tin, and zinc to cause formation of flammable hydrogen gas.

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Potassium iodide is incompatible with strong reducing agents; strong acids; steel; aluminum; alkali metals; brass; magnesium; zinc cadmium; copper; tin; nickel and their alloys.

Hazardous Decomposition Products : Oxides of potassium.  
Hazardous Polymerization : Has not been reported.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

RTECS# : CAS# 1310-58-3: TT2100000  
CAS# 7732-18-5: ZC0110000  
CAS# 7681-11-0: TT2975000

LD50/LC50: CAS# 1310-58-3: Draize test, rabbit, skin: 50 mg/24H Severe; Oral, rat: LD50 = 273 mg/kg.  
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.

Carcinogenicity:  
Potassium hydroxide - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
Water - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
Epidemiology: No data available.  
Teratogenicity: No data available.  
Reproductive Effects: No data available.  
Neurotoxicity: No data available.  
Mutagenicity: No data available.  
Other Studies: No data available.

## **SECTION 12 - ECOLOGICAL INFORMATION**

Ecotoxicity : Potassium iodide is expected to cause little oxygen depletion in aquatic systems. It has a moderate potential to affect aquatic organisms.

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.  
RCRA U-Series: None listed.

## **SECTION 14 - TRANSPORT INFORMATION**

US DOT  
Shipping Name : POTASSIUM HYDROXIDE, SOLUTION  
Hazard Class : 8  
UN Number : UN1814  
Packing Group : II  
Canadian TDG : No information available.

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## **SECTION 15 - REGULATORY INFORMATION**

### US FEDERAL

#### TSCA :

CAS# 1310-58-3 is listed on the TSCA inventory.

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

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

Health & Safety Reporting List : None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b : None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule : None of the chemicals in this material have a SNUR under TSCA.

#### SARA :

Section 302 (RQ) : CAS# 1310-58-3: final RQ = 1000 pounds (454 kg)

Section 302 (TPQ) : None of the chemicals in this product have a TPQ.

SARA Codes : CAS # 1310-58-3: acute, reactive.

CAS # 7681-11-0: acute, chronic.

Section 313 : No chemicals are reportable under Section 313.

Clean Air Act : This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act: CAS# 1310-58-3 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority

Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA :

None of the chemicals in this product are considered highly hazardous by OSHA.

### STATE

Potassium hydroxide can be found on the following state right to know lists : California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Potassium iodide is not present on state lists from CA, PA, MN, MA, FL, or NJ.

Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level : None of the chemicals in this product are listed.

#### European/International Regulations

##### European Labeling in Accordance with EC Directives

Hazard Symbols : C

Risk Phrases: R 22 Harmful if swallowed.

R 35 Causes severe burns.

Safety Phrases : S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection) : CAS# 1310-58-3: 1

CAS# 7732-18-5: No information available.

United Kingdom Occupational Exposure Limits : CAS# 1310-58-3: OES-United Kingdom, STEL 2 mg/m<sup>3</sup> STEL

CAS# 1310-58-3: OES-United Kingdom, STEL 2 mg/m<sup>3</sup> STEL

Canada : CAS# 1310-58-3 is listed on Canada's DSL List.

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

This product has a WHMIS classification of E, D1B.

CAS# 1310-58-3 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

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Exposure Limits : CAS# 1310-58-3 : OEL-AUSTRALIA:TWA 2 mg/m<sup>3</sup>  
OEL-BELGIUM :STEL 2 mg/m<sup>3</sup>  
OEL-DENMARK :TWA 2 mg/m<sup>3</sup>  
OEL-FINLAND :TWA 2 mg/m<sup>3</sup>  
OEL-FRANCE :STEL 2 mg/m<sup>3</sup>  
OEL-JAPAN :STEL 2 mg/m<sup>3</sup>  
OEL-THE NETHERLANDS :TWA 2 mg/m<sup>3</sup>  
OEL-SWITZERLAND :TWA 2 mg/m<sup>3</sup>  
OEL-UNITED KINGDOM :TWA 2 mg/m<sup>3</sup>;STEL 2 mg/m<sup>3</sup>  
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## **SECTION 16 - ADDITIONAL INFORMATION**

MSDS Creation Date: 08/20/2002

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 way 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.