

# Safety Data Sheet



Revision Date: 7/21/2014

SDS # SDS-10312-01

Universal Block Solution

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Description:**

**Product Code**

Universal Block Solution

71-00-61

**Hazardous Reagent**

Universal Block Solution

**Hazardous Reagent Product code**

Catalog No. listed above

**Recommended Use** Reagent

**Contact Manufacturer** KPL, Inc.  
910 Clopper Road  
Gaithersburg, Maryland 20878  
USA

**Phone #:** 1-301-948-7755

**Fax #:** 1-301-948-0169

**Web:** www.kpl.com

**Email:** kplmsds@seracare.com

**Emergency Telephone Numbers:**

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1 ) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1 ) 800 424 8802	Hours: 24 hours/day, 7 days/week

**CHEMTREC:** CHEMTREC Customer Number:- CCN12505\*  
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 CCN12505 or  
+1 703-527-3887 (collect calls accepted)

## 2. HAZARD IDENTIFICATION

**Hazard Type** Health and Fire Hazard

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

**Classification** Flam. Liq. 2: H225  
Eye Irrit. 2: H319  
STOT SE 3: H336

**Hazard Statement** H225: Highly flammable liquid and vapour  
H319: Causes serious eye irritation  
H336: May cause drowsiness or dizziness

**Precautionary Statement** P210: Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.  
P233: Keep container tightly closed.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P261: Avoid breathing dust/fume/gas/mist/ vapours/spray.  
P264: Wash skin thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

### Symbols of Danger

GHS02  
GHS07  
Dgr: Danger



### Data for 100% Hazardous Chemical

ROUTES OF EXPOSURE:	The substance can be absorbed into the body by inhalation of its vapour.
INHALATION RISK:	A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.
SHORT-TERM EXPOSURE	The substance is irritating to the eyes and the respiratory tract . The substance may cause effects on the central nervous system , resulting in depression. Exposure far above the OEL may result in unconsciousness.
LONG-TERM EXPOSURE:	The liquid defats the skin.

#### The product is a Mixture. It May Cause the following symptoms.

EYES: Redness.

SKIN: Dry skin.

INHALATION: Cough. Dizziness. Drowsiness. Headache. Sore throat. (See Ingestion).

INGESTION: Abdominal pain. Laboured breathing. Nausea. Unconsciousness. Vomiting. (Further see Inhalation).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
Universal Block Solution	Isopropyl Alcohol	5%	67-63-0
	Hydrogen Peroxide, 30%	< 5%	7722-84-1

### Classification

Flam. Liq. 2: H225  
Eye Irrit. 2: H319  
STOT SE 3: H336

## 4. FIRST AID MEASURES

### Data for 100% Hazardous Chemical

<b>Ingestion First Aid:</b>	Rinse mouth. Do NOT induce vomiting. Rest. Refer for medical attention.
<b>Inhalation First Aid:</b>	Fresh air, rest. Refer for medical attention.
<b>Skin First Aid:</b>	Remove contaminated clothes. Rinse and then wash skin with water and soap.
<b>Eye First Aid:</b>	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

## 5. FIRE FIGHTING MEASURES

### Data For 100% Hazardous Chemical

<b>Fire Acute Hazard:</b> Highly flammable.	<b>Fire Prevention:</b> NO open flames, NO sparks, and NO smoking.	<b>Fire Fighting:</b> Powder, alcohol-resistant foam, water in large amounts, carbon dioxide.
<b>Explosion Acute Hazard:</b>		
Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting.	In case of fire: keep drums, etc., cool by spraying with water.
<b>CHEMICAL DANGERS:</b> Reacts with strong oxidants. Attacks some plastic, rubber.		
<b>PHYSICAL DANGERS:</b> The vapour mixes well with air, explosive mixtures are easily formed.		

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Take care to maintain clean working place. The substance must not be present at workplaces in quantities above that required for work to be progressed. Do not leave container open. Use leak-proof equipment with exhaust for refilling or transfer. Avoid splashing. Fill only into labelled container. Use solvent resistant utensils. Use an appropriate exterior vessel when transporting in fragile containers.
<b>Environmental Precautions</b>	Endangerment of water - Low hazard to waters. Inform the responsible authorities when very large quantities get into water, drainage, sewer, or the ground.
<b>Method of Containment</b>	Shut off all sources of ignition. Evacuate area. Warn affected surroundings. Wear respiratory protection, eye protection, hand protection and body protection. Absorb any spilt liquid with an absorbent (e.g. diatomite, vermiculite, sand) and dispose of according to regulations. Pump off larger quantities. Use non-sparking tools. Dilute small amounts with water and flush. Afterwards ventilate area and wash spill site.
<b>Methods of Clean-up</b>	Use protective equipment while cleaning if necessary. Clean-up with copious amounts of water.
<b>Other Information</b>	Not applicable

### Data for 100% Hazardous Chemical

<b>SPILLAGE DISPOSAL</b>	Personal protection: filter respirator for organic gases and vapours. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place.
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## 7. HANDLING AND STORAGE

<b>Handling:</b>	Wear appropriate PPE. Refer to section 8.
<b>Storage:</b>	Store tightly capped at 2 – 8°C.

### Data for 100% Hazardous Chemical

<b>STORAGE</b>	Fireproof. Separated from strong oxidants. Cool. Well closed.
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## 8. EXPOSURE CONTROL

### Data for 100% Hazardous Chemical

• <b>INHALATION</b>	Ventilation, local exhaust, or breathing protection.
• <b>EYES</b>	Safety spectacles or eye protection in combination with breathing protection.
• <b>SKIN</b>	Protective gloves.
• <b>INGESTION</b>	Do not eat, drink, or smoke during work.

**Engineering Controls** Ensure adequate ventilation, especially in confined areas

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Clear, Colorless Solution.

**Physical State** Liquid.

**pH:** Not Available

### Data for 100% Hazardous Chemical

Boiling point: °C	Melting point: -90°C	Relative density (water = 1): 0.79	Solubility in water: miscible	Vapour pressure, kPa at 20°C: 4.4
Relative vapour density (air = 1): 2.1	Relative density of the vapour/air-mixture at 20°C (air = 1): 1.05	Flash point: 11.7°C c.c.	Auto-ignition temperature: 456°C	Explosive limits, vol% in air: 2-12
			Explosive limits, vol% in air: 2-12	Octanol/water partition coefficient as log Pow: 0.05

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions.

**Incompatibility Materials to Avoid** Data for 100% Isopropyl Alcohol: Risk of explosion in contact with: strong oxidizing agents, nitric acid, oxygen, hydrogen peroxide, barium perchlorate, sodium dichromate, phosgene / iron salt, trinitro methane, nitric acid (rarely), nitrogen dioxide, trinitro methan.

**Hazardous Decomposition Products** Data for 100% Isopropyl Alcohol: Thermal decomposition: Decomposition when heated.

Decomposition products:  
propanal; propane; propene; ethane; ethene; acetylene; formaldehyde; carbon monoxide;

**Hazardous Polymerization** Will not occur

### Data for 100% Hazardous Chemical

**CHEMICAL DANGERS:** Reacts with strong oxidants. Attacks some plastic, rubber.

**PHYSICAL DANGERS:** The vapour mixes well with air, explosive mixtures are easily formed.

## 11. TOXICOLOGY MEASURES

### Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

**LD50 Oral** Data for % Isopropyl Alcohol: - LD50 oral rat | Value: 5050 mg/kg  
Reference: Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 43(1), Pg. 8, 1978.

**LD50 Dermal** Data for % Isopropyl Alcohol: - LD50 dermal Species: Rabbit | Value: 12800 mg/kg  
Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 100, 1974.

**LC50 Inhalation** Data for % Isopropyl Alcohol: - LC50 Fish (96 hours)

Minimum: 4200 mg/l  
Maximum: 11100 mg/l  
Median: 9640 mg/l

Study number: 5

Reference for median:

Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414

LC50 Crustaceans (48 hours)

Minimum: 1400 mg/l  
 Maximum: 1400 mg/l  
 Median: 1400 mg/l

Study number: 1

Reference for median:

Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents. Mar.Pollut.Bull. 5:116-118

### Chronic Toxicity

<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Irritation</b>	Data for 100% Isopropyl Alcohol: Eye Irrit. 2 Causes serious eye irritation.
<b>Corrosivity</b>	No Data Available
<b>Sensitization</b>	No Data Available
<b>Neurological Effects</b>	No Data Available
<b>Mutagenic Effects</b>	No Data Available
<b>Reproductive Effects</b>	No Data Available
<b>Developmental Effects</b>	No Data Available
<b>Target Organ Effects</b>	Data for 100% Isopropyl alcohol: The substance can be absorbed into the body by inhalation of its vapour.
<b>Other adverse effects</b>	Not Available

## 12. ECOLOGICAL MEASURES

<b>Ecotoxicity</b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
<b>Persistence/Degradability</b>	Not Available
<b>Mobility in Environmental Media</b>	Not Available
<b>Bioaccumulation/Accumulation</b>	Not Available

## 13. DISPOSAL MEASURES

<b>Waste Disposal Method:</b>	Observe all Federal, State and Local laws concerning health and pollution.
<b>Contaminated Packaging:</b>	Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.
<b>US EPA Waste Number:</b>	Not Available

## 14. TRANSPORTATION MEASURES

<b>DOT:</b>	Data for 100% Isopropyl Alcohol: UN Hazard Class: 3; UN Pack Group: II
<b>IATA:</b>	Not Available
<b>ADR (road)/ RID (rail):</b>	Not Available
<b>IMDG (sea):</b>	Not Available
<b>General Transport Regulations</b>	Data for 100% Isopropyl Alcohol: UN Hazard Class: 3; UN Pack Group: II

## 15. REGULATORY MEASURES

**This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 q 2.C1.**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

Isopropyl alcohol 67-63-0 SECTION 313

Hydrogen peroxide (Conc.> 52%) 7722-84-1 Section 304 EHS RQ: 1,000 Section 302 (EHS) TPQ: 1,000

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)**

Not Listed

**State Regulations****California Proposition 65:**

This product contains the following Proposition 65 chemicals: None Listed

**State Right to Know Act**

Chemical Name	Isopropyl Alcohol	Hydrogen Peroxide, 30%
Massachusetts	Listed	Listed
New Jersey	Listed	Listed
Pennsylvania	Listed	Listed
New York	Listed	Listed
Rhode Island	Listed	Listed

**International Inventories**

Chemical Name	Isopropyl Alcohol	Hydrogen Peroxide, 30%
TSCA	Listed	Listed
DSL	Listed	Listed
NDSL	Not Listed	Not Listed
EINECS	Listed	Listed
CHINA	Listed	Listed
KECL	Listed	Listed
JAPAN:	Listed	Listed
AICS	Listed	Listed

**EU Regulations**

<b>Annex I Index#</b>	Annex I Index# : 603-117-00-0 Substance Name in Annex 1 : propan-2-ol isopropyl alcohol isopropanol
<b>Classification</b>	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H336
<b>Risk Phrases</b>	H225: Highly flammable liquid and vapour H319: Causes serious eye irritation H336: May cause drowsiness or dizziness
<b>Safety Phrases</b>	P210: Keep away from heat/ sparks/open flames/hot surfaces. — No smoking. P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing dust/fume/gas/mist/ vapours/spray. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection.

<b>Symbols and Indications of Danger</b>	GHS02 GHS07 Dgr: Danger
<b>Specific Concentration Limits</b>	No Specific Concentration Limits for Isopropyl Alcohol CAS 67-63-0  Data for Hydrogen Peroxide CAS: 7722-84-1: Ox. Liq. 1; H271: C ≥ 70 %**** Ox. Liq. 2; H272: 50 % ≤ C < 70 % ***** Skin Corr. 1A; H314: C ≥ 70 % Skin Corr. 1B; H314: 50 % ≤ C < 70 % Skin Irrit. 2; H315: 35 % ≤ C < 50 % Eye Dam. 1; H318: 8 % ≤ C < 50 % Eye Irrit. 2; H319: 5 % ≤ C < 8 % STOT SE 3; H335; C ≥ 35 %
<b>Export and Import</b>	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
<b>European Priority List</b>	Data for Isopropyl Alcohol CAS 67-63-0: This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).  Data for Hydrogen Peroxide CAS: 7722-84-1: European Priority Lists and Risk Assessment (Council Regulation (EEC) No 793/93) Information: Rapporteur : Finland Priority List# : 2 ECB# : 022

## 16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

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