Safety Data Sheet

SDS # SDS-10312-01

Revision Date: 7/21/2014

Universal Block Solution

1.	PRODUCT	AND	COMPANY	IDENTIF	ICATION
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Product Description:		Produc	ct Code	
Universal Block Solution		71-00-6	1	
Hazardous Reagent Universal Block Solution	Hazardous Catalog No. li	Reagent Product	t code	
Recommended Use	Reagent			
Contact Manufacturer	KPL, Inc.	Phone #:	1-301-948-7755	
	910 Clopper Road Gaithersburg, Maryland 20878	Fax #:	1-301-948-0169	
	USA	Web:	www.kpl.com	
Emergency Telephone	Numbers	Eman:	kpinisus@seracare.com	
AUSTRALIA – POISONS IN CANADIAN TRANSPORT E UK – THE USA- NATION	IFORMATION CENTER Telephone: 13 1 MERGENCY CENTER Telephone: (1)613 996 0 NATIONAL FOCUS Telephone: (44) 029 2041 0 AL RESPONSE CENTER Telephone: (1) 800 424	I1 26 Hours: 24 Hours: 24 Hours: 24 Hours: 24 Hours: 09:0 6388 Hours: 09:0 8802 Hours: 24	nours nours/day, 7 days/week)0-17:00 GMT hours/day, 7 days/week	
CHEMTREC: CHE For C Call (Withi +1 7(MTREC Customer Number:- CCN12505* Chemical Emergency Spill, Leak, Fire, Exposure, or A CHEMTREC Day or Night n USA and Canada: 1-800-424-9300 CCN12505 or 03-527-3887 (collect calls accepted)	Accident		
	2. HAZARD IDENTIF			
Hazard Type	Health and Fire Hazard			
	GHS Classification in accordance with 29 C	FR 1910 (OSHA H	ICS)	
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/ P233: Keep container tightly closed. P240: Ground/bond container and receiving equip P241: Use explosion-proof electrical/ventilating/lig P242: Use only non-sparking tools. P243: Take precautionary measures against stati P261: Avoid breathing dust/fume/gas/mist/ vapou P264: Wash skin thoroughly after handling. 	/hot surfaces. — N oment. ghting equipment. c discharge. ırs/spray.	lo smoking.	

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>	CHEMICAL	<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

Ingestion First Aid:	Rinse mouth. Do NOT induce vomiting. Rest. Refer for medical attention.
Inhalation First Aid:	Fresh air, rest. Refer for medical attention.
Skin First Aid:	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eye First Aid:	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

Fire Acute Hazard:	Fire Prevention:	Fire Fighting:
Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, alcohol-resistant foam, water in large amounts, carbon dioxide.
Explosion Acute Hazard	k:	
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.
CHEMICAL DANGERS:	Reacts with strong oxidants. Attacks some plastic, rubber.	
PHYSICAL DANGERS:	The vapour mixes well with air, explosive mixtures are easily	formed.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	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.
Environmental Precautions	Endangerment of water - Low hazard to waters. Inform the responsible authorities when very large quantities get into water, drainage, sewer, or the ground.
Method of Containment	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.
Methods of Clean-up	Use protective equipment while cleaning if necessary. Clean-up with copious amounts of water.
Other Information	Not applicable

Data for 100% Hazardous Chemical

SPILLAGEPersonal 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.

7. HANDLING AND STORAGE

Handling:

Wear appropriate PPE. Refer to section 8.

Storage:

Store tightly capped at 2 – 8°C.

Data for 100% Hazardous Chemical

STORAGE

Fireproof. Separated from strong oxidants. Cool. Well closed.

8. EXPOSURE CONTROL

Data for 100% Hazardous Chemical

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

Engineering Controls Ensure adequate ventilation, especially in confined areas

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Colo	orless Solution.			
Physical State	Liquid.			pH: Not	Available
Data for 100% Hazardou	s 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	Octanol/water partition coefficient as log Pow: 0.05
10. STABILITY AND REACTIVITY					
Chemical Stability	Stable unde	er normal conditions.			
Incompatibility Mate Avoid	Prials to Data for 10 agents, nitr dichromate trinotro met	0% Isopropyl Alcohol: R ic acid, oxygen, hydrogel , phosgene / iron salt, trii han.	isk of explosion in cont n peroxide, barium pero hitro methane, nitric aci	act with: strong oxidizing chlorate, sodium id (rarely), nitrogen dioxid	e,

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

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

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

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

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

13.	DISPOSAL	MEASURES
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Waste Disposal Method:	Observe all Federal, State and Local laws concerning health and pollution.
Contaminated Packaging:	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.

US EPA Waste Number: Not Available

14. TRANSPORTATION MEASURES

DOT:	Data for 100% Isopropyl Alchol: UN Hazard Class: 3; UN Pack Group: II
IATA:	Not Available
ADR (road)/ RID (rail):	Not Available
IMDG (sea):	Not Available
General Transport Regulations	Data for 100% Isopropyl Alchol: 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 g 2.C1.

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<u>SARA 313</u>

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 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

Annex I Index#	Annex I Index# : 603-117-00-0 Substance Name in Annex 1 : propan-2-ol isopropyl alcohol isopropanol
Classification	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H336
Risk Phrases	H225: Highly flammable liquid and vapour H319: Causes serious eye irritation H336: May cause drowsiness or dizziness
Safety Phrases	 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 and Indications of Danger	GHS02 GHS07 Dgr: Danger
Specific Concentration Limits	No Specific Concentration Limits for Isopropyl Alcohol CAS 67-63-0 Data for Hydrogen Peroxide CAS: 7722-84-1: Ox. Liq. 1; H271: $C \ge 70 \%^{****}$ Ox. Liq. 2; H272: 50 % $\le C < 70 \%^{*****}$ Skin Corr. 1A; H314: $C \ge 70 \%$ Skin Corr. 1B; H314: 50 % $\le C < 70 \%$ Skin Irrit. 2; H315: 35 % $\le C < 50 \%$ Eye Dam. 1; H318: 8 % $\le C < 50 \%$ Eye Irrit. 2; H319: 5 % $\le C < 8 \%$ STOT SE 3; H335; $C \ge 35 \%$
Export and Import	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
European Priority List	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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