MATERIAL SAFETY DATA SHEET

Isopropyl Alcohol (2-propanol)

SECTION 1 . Product and Company Idenfication

Product Name and Synonym: Isopropyl Alcohol (2-propanol)

Product Code: I7612

Material Uses:

Manufacturer: Science Stuff
1104 Newport Ave

Austin, TX 78753
(512) 837-6020

Health:	2
Flammability:	3
Reactivity:	0

Hazard Rating:
Least 0 Slight 1 Moderate 2 High 3 Extreme 4

NA=Not Applicable NE=Not Established

Entry Date : 6/7/2013

Print Date: 6/7/2013

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

SECTION 2 HAZARD IDENTIFICATION

Keep away from heat and ignition sources. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Physical state: Liquid (Colorless)

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview:

WARNING!

HARMFUL IF INHALED OR SWALLOWED
CAUSES SEVERE EYE IRRITATION
FLAMMABLE LIQUID AND VAPOR
VAPOR MAY CAUSE FLASH FIRE MAY BE HARMFUL IF ABSORBED THROUGH SKIN
MAY CAUSE SKIN IRRITATION
MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, EYES, CENTRAL NERVOUS SYSTEM
ASPIRATION HAZARD

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion

Potential acute health effects:

Inhalation: Toxic by inhalation. Vapors may cause drowsiness and dizziness
Ingestion: Toxic if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin: May be harmful in contact with skin. May cause skin irritation.
Eyes: Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Target organs: May cause damage to the following organs: upper respiratory tract, skin, eyes, central nervous system (CNS).

Medical conditions aggravated by over-exposure: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
☑	Isopropyl Alcohol (2-propanol)	CAS# 67-63-0	100%	V/V	OSHA TWA 400 ppm, STEL 500 ppm

SECTION 4 FIRST AID MEASURES

Keep away from heat and ignition sources. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact flush contaminated skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Water spray, dry chemical, carbon dioxide, alcohol foam
Fire / Explosion Hazards:	FLAMMABLE! Vapor air mixtures are explosive within flammable limits noted. Vapors may travel to distant ignition source and flash back.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Eliminate Ignition Sources. Neutralize with: Soda lime, soda ash. Absorb with vermiculite or other inert material. Place in container.

SECTION 7 HANDLING AND STORAGE

Keep away from heat and flame. Do not get in eyes, on skin, on clothing. Use with adequate ventilation.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection:	Organic Vapor Cartridge
Ventilation	
	Local Exhaust ☑
	Mechanical ☐
Protective Gloves:	NIOSH Approved Gloves
Eye Protection:	Splash Goggles
Other Protective Equipment:	Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	-89°C	Percent Volatile by Volume:	>99
Boiling Point:	82°C	Evaporation Rate	Information not available
Vapor Pressure:	33 mm Hg @ 25° C	Evaporation Standard	
Vapor Density:	2.1 (air=1)	Auto Ignition Temp	399° C
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	2.0%
Appearance /Odors:	Clear, colorless liquid with mild odor	Upper Flamm. Limit in Air	12.0%
Flash Point:	12°C (closed cup)		
Specific Gravity:	.79		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Avoid heat and ignition sources
Materials to Avoid:	Strong oxidizers, metals, strong bases, amines
Hazardous Decomposition Products:	Carbon Oxides
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Toxicity data

United States

Product/ingredient name – Isopropyl Alcohol

Test	Result	Route	Species
LD50	12800 mg/kg	Dermal	Rabbit
LD50	2735 mg/kg	Dermal	Rat
Intraperitoneal			
LD50	1088 mg/kg	Intravenous	Rat
LD50	5045 mg/kg	Oral	Rat
LD50	5000 mg/kg	Oral	Rat
LD50	6410 mg/kg	Oral	Rabbit
LDLo	1537 mg/kg	Oral	Dog
LDLo	3570 mg/kg	Oral	Human
LDLo	5272 mg/kg	Oral	Man
TDLo	800 mg/kg	Oral	Rat
Intraperitoneal			
LC50	16000 ppm	Inhalation Gas	Rat

Carcinogenicity Classification

Product/ingredient name: Isopropyl Alcohol
ACGIH: A4
IARC: 3
EPA: -
NIOSH: -
NTP: -
OSHA: -

Specific effects
Carcinogenic effects: No known significant effects or critical hazards
Mutagenic effects: No known significant effects or critical hazards
Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards

SECTION 12 Ecological Information

Ecotoxicity data - United States

Product/ingredient name: Isopropyl Alcohol

Result	Species	Exposure
Acute EC50 10000 mg/L	Fish	48 hours
Acute LC50 10400 mg/L	Fish	96 hours
Acute LC50 11130 mg/L	Fish	96 hours
Acute LC50 9640 mg/L	Fish	96 hours
Acute LC50 6550 mg/L	Fish	96 hours
Acute LC50 <1400 mg/L	Fish	96 hours

Result: Acute LC50<1400000 ug/L
Species: Fish – Western mospuitofish–Gambusia affinis – 20 to 30 mm
Exposure: 96 hours

Result: Acute LC50 1400000 to 1950000ug/L Marine water
Species: Crustaceans – Common shrimp, sand shrimp – Crangon crangon
Exposure: 48 hours

Result: Acute LC50 11130000ug/L Fresh water
Species: Pimephales promelas – Juvenile (Fledgling, Hatchling, Weanling) 4 to 8 weeks 1.1 to 3.1 cm
Exposure: 96 hours

Result: Acute LC50 10400000 to 1060000000 ug/LFresh water
Species: Fish – Fathead minnow-Pimephales promelas29 days – 20 mm-0.103 g
Exposure: 96 hours

Result: Acute LC 50 6550000to 7450000 ug/L
Species: Fish – Fathead minnow – Pimephales promelas – 31 days – 17.4 mm – 0.082 g
Exposure: 96 hours

Result: Acute LC50 4200000 ug/L Fresh water
Species: Fish – Harlequinfish, red rasbora – Rasbora – heteromorpha – 1 to 3 cm
Exposure: 96 hours

Environmental effects: No known significant effects or critical hazards.
Other adverse effects: No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations

SECTION 14 Transport Information

DOT Classification: UN1219, Isopropanol, 3, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

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

Ingredient	TSCA	EC	Japan	Australia
Isopropyl Alcohol (67-63-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

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

Ingredient	--Canada-- Korea	DSL	NDSL	Phil.
Isopropyl Alcohol (67-63-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------

Ingredient	-SARA 302- RQ	TPQ	------SARA 313------ List	Chemical Catg.
Isopropyl Alcohol (67-63-0)	No	No	Yes	No
Water (7732-18-5)	No	No	No	No

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

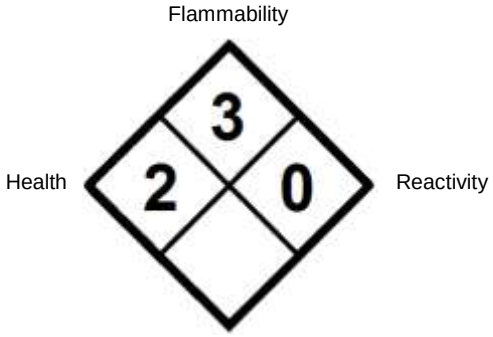
Ingredient	-RCRA- CERCLA	-TSCA- 261.33	8(d)
Isopropyl Alcohol (67-63-0)	No	No	No
Water (7732-18-5)	No	No	

No

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

Australian Hazchem Code: 2[S]2
Poison Schedule: None allocated.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16 Additional Information



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Revisions

1/16/2013	0	Creation date 12/18/12
1/16/2013	0.1	Revised to 16 sections LS

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