



# CHEMICAL SAFETY DATA SHEET

CSDS/S-09-E-3  
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Date of preparation : 6<sup>th</sup> August 2007

## SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 PRODUCT DETAILS :

Product name : Isopropyl Alcohol  
Chemical name : 2-Propanol  
Other name : Isopropanol  
Chemical formula :  $(CH_3)_2CHOH$   
Chemical family : Alcohol

### 1.2 COMPANY IDENTIFICATION

Manufacturer :

Supplier : Craftiviti Sdn Bhd  
D-1-46, 1st Floor, Block Dahlia, 10 Boulevard,  
SPRINT Highway, PJU 6A, Petaling Jaya, 47400  
Selangor, Malaysia.

enquiry@craftiviti.com

Emergency telephone number : +(603) – 74995553

## SECTION 2 : COMPOSITION / INFORMATION ON INGREDIENT

Chemical name	CAS No.	Proportion
Isopropyl Alcohol	67-63-0	100 %

## SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear liquid  
Odor : Aromatic  
Solubility in water : Completely  
Boiling point : 82-83 °C  
Melting point : - 88 °C  
Vapor pressure : 33 mmHg @ 20 °C  
Evaporation rate (n-Butyl aetate =1) : 1.5  
Vapor density : 2.0 (Air = 1.0)  
Specific gravity : 0.786 @ 20°C  
Flash point : - 11.7 °C  
Autoignition temperature : 480 °C  
pH : No data  
Flammable Limit : 2 - 12 % Volume

## SECTION 4 : HAZARD IDENTIFICATION

Safety  
Highly Flammable.

**Potential Health Effects**

- EYE** : May cause irritation.  
**SKIN** : Prolonged exposure may cause skin irritation.  
**INGESTION** : May cause headache, drowsiness, unconsciousness and fatal  
**INHALATION** : May cause irritation of the respiratory system.

**SECTION 5 : FIRST AID MEASURES**

- EYE** : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- SKIN** : Wash with soap and water. Get medical attention if irritation develops or persists.
- INGESTION** : Do Not induce vomiting. Keep at rest. Get prompt medical attention.
- INHALATION** : Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given if necessary. If signs and symptoms of toxicity persist, call a physician.

**SECTION 6 : FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES :**

Flammable. Material will readily ignite at ambient temperatures.  
Colourless vapors may travel considerable distance to ignition sources and cause flash fires or explosions.

**HAZARDOUS COMBUSTION PRODUCTS**

Carbon dioxide and some carbon monoxide

**EXTINGUISHING MEDIA**

Alcohol resistant foam, carbon dioxide, and dry chemical

**FIRE FIGHTING INSTRUCTIONS**

Water can be used to cool fire-exposed containers, to protect personnel and to disperse vapours and spills.

**SECTION 7 : ACCIDENTAL RELEASE MEASURE**

**LAND SPILL**

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard. Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do Not use combustible materials such as sawdust. Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.

**WATER SPILL**

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.

**SECTION 8 : HANDLING AND STORAGE**

**HANDLING**

Avoid contact with eyes. Keep container closed. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with skin. Use grounding and bonding connection when transferring material to prevent static discharge, fire or explosion. Use spark proof tools and explosion proof equipment.

#### STORAGE

Store in well-ventilated area. Keep away from heat, sparks, and flame. Emptied containers may retain product residues. Precautions apply to emptied containers.

### SECTION 9 : EXPOSURE CONTROL AND PERSONAL PROTECTION

#### ENGINEERING CONTROL

Control airborne concentrations below the exposure limits. Use only with adequate ventilation. Local exhaust ventilation may be necessary. Lethal concentrations may exist in area with poor ventilation.

#### RESPIRATORY PROTECTION

When respiratory protection is required, or concentrations are unknown use approved air-purifying respirator equipped with organic vapour cartridges or canisters. For emergency and other conditions where exposure limit may be greatly exceeded, use an approved positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

#### SKIN PROTECTION

For brief contact, no precautions, other than clean body-covering clothing should be needed. Use impervious chemical resistant gloves.

#### EYE PROTECTION

Use chemical goggles. If vapour exposure causes eye discomfort, use a full-face, supplied-air respirator.

### SECTION 10 : STABILITY AND REACTIVITY

#### CHEMICAL STABILITY

(CONDITIONS TO AVOID) Keep away from flames and spark-producing equipment. Stable.

#### INCOMPATIBILITY

Avoid strong oxidizing agents

#### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide

#### HAZARDOUS POLYMERIZATION

Will not occur

### SECTION 11 : TOXICOLOGICAL INFORMATION

LC50 (rat) Inhalation	: 22500 ppm
LD50 (rat) Oral	: 5810 mg/kg
LD 50 (rabbit) Oral	: 7800 mg/kg
TWA (8 hours)	: 400ppm (983mg/m3)
Ceiling limit	: nil

### SECTION 12 : ECOLOGICAL INFORMATION

Prolonged or repeated contact may cause chronic dermatitis, chemical pneumonitis. Appreciable evaporation to air is expected in the environment.

### SECTION 13 : DISPOSAL INFORMATION

Preferred method is incineration or biological treatment in approved facility.

**SECTION 14 : TRANSPORT INFORMATION**

Transport Document Name : HIGHLY FLAMMABLE, LIQUID, n.o.s. (Isopropyl Alcohol : 3, UN 1219, II).  
UN No. : 1219  
Class : 3  
Packaging Group : II

**SECTION 15 : REGULATORY INFORMATION**

In accordance to Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997

**Risk Phrase :**

R11 Highly flammable  
R20/22 Harmful by inhalation and if swallowed  
R36/37 Irritating to eyes and respiratory system

**Safety Phrase :**

S16 Keep away from sources of ignition – No Smoking  
S23 Do not breathe vapour  
S24/25 Avoid contact with skin and eyes  
S43 In case of fire, use chemical powder or foam

**SECTION 16 : OTHER INFORMATION**

This information supersedes CSDS/S-09-E-2 dated 3<sup>rd</sup> July 2003.

**Source of Data :-**

MSDS of Material Manufacturers

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