

# Safety Data Sheet

Iso-Butanol

## SECTION I - IDENTIFICATION



DATE PREPARED: ..... 10/3/1994  
REVISION DATE: ..... 5/29/2014  
CHEMTEL: ..... 800-255-3924  
PRODUCT CODE: ..... IBA

ADDRESS: ..... 2141 Palomar Airport Rd. Suite 125  
Carlsbad, CA 92011

EMERGENCY PHONE NUMBER: ..... (800) 255-3924

PRODUCT NAME: ..... Iso-Butanol

CHEMICAL FAMILY: .....

CAS NUMBER: ..... 78-83-1

## SECTION II - HAZARDOUS IDENTIFICATION

### GHS CLASSIFICATION:

#### Classification

Flammable Liquids	Category 3
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity, single exposure, R	Category 3
Specific target organ toxicity, single exposure, N	Category 3
Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2

### DANGER!

#### GHS LABEL:



#### Hazard Statements

H226	Flammable liquid and vapor
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H336	May cause dizziness or drowsiness
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

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### Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surface - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/light/equipment, etc.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated are.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or a doctor/physician if you feel unwell.
P332+313	If skin irritation occurs: get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370+378	In case of fire: Usedry sand, dry chemical, or alcohol-resistant foam for extinction.
P391	Collect spillage.
P403+233	Store in a well ventilated place. Keep container tightly closed.
P403+235	Store in a well ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

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#### SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

Component Name	CAS #	Component%	OSHA PEL	ACGIH TLV
Iso Butanol	78-83-1	100%	100 ppm	50 ppm

#### SECTION IV - FIRST AID MEASURES

**Contact with eyes:** Flush with water for 15 minutes. Seek immediate medical attention.

**Skin contact:** Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek immediate medical attention.

**Inhalation:** Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.

**Ingestion:** If vomiting occurs, keep head below hips to prevent aspiration into lungs. Induce vomiting.

#### SECTION V - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Water fog, foam, CO<sub>2</sub>, dry chemical.

**Special Fire Fighting Procedures** Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

**Unusual Fire Fighting Hazards:** Product is flammable and may be ignited by heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights or mechanical/electrical equipment). Vapors are heavier than air and may accumulate in low areas. Vapors may travel considerable distances to a source of ignition where they can ignite, flashback or explode. May create vapor/air explosion hazard indoors, outdoors or in sewers. If container is not properly cooled, it can explode in the heat of a fire.

#### SECTION VI - ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Keep all sources of ignition and hot metal surfaces away from spill or release.

Evacuate all unprotected personnel from the area.

**Environmental Precautions:** Prevent liquid from entering drains, sewers or waterways.

Contain spill if it can be done with minimal risk.

Notify proper authorities.

**Methods for Cleaning Up:** Use foam on spills to minimize vapors.

Using only non-sparking tools and explosion proof equipment, collect spill on absorbent material and put into approved container.

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### SECTION VII - HANDLING AND STORAGE

- Handling and Storage:**
- NFPA Class I storage.
  - Vent container carefully before opening.
  - Bond and ground all equipment when transferring from one vessel to another. The use of explosion-proof equipment is recommended.
  - "Empty" containers retain residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources.
  - Keep containers tightly closed when not in use.
  - Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling.

### SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

#### EXPOSURE LIMITS:

Component Name	CAS #	OSHA PEL	ACGIH TLV
Iso Butanol	78-83-1	100 ppm	50 ppm

**Engineering Controls:** Adequate local or mechanical to reduce vapor or mist to below the PEL or TLV.

**Monitoring:** Follow accepted work practices for handling a flammable material. Do not eat, drink or smoke in areas where this chemical is used or stored. Have eye wash stations and safety showers readily available.

#### Personal Protective Equipment (PPE)

**Eye Protection:** Goggles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

**Skin Protection:** Impervious solvent resistant gloves.  
Impervious apron and work boots recommend where splashing may occur.

**Respiratory Protection:** Use the proper respirator in areas where the chemical exposure is unknown or above the OSHA PEL or ACGIH TLV.

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### SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, Colorless Liquid
<b>Odor</b>	Sharp Alcohol Odor
<b>pH@25°C</b>	-
<b>Melting/Freezing Point</b>	-
<b>Boiling Point</b>	226°F
<b>Flashpoint</b>	82°F, TCC
<b>Specific Gravity</b>	0.80
<b>Solubility</b>	9.5g/100ml water @ 20°C (68°F)
<b>Auto-Ignition Temperature</b>	-
<b>Decomposition Temperature</b>	-
<b>VOC Content</b>	100% (6.6#/gal)
<b>Odor Threshold</b>	-
<b>Boiling Range</b>	226°F
<b>Evaporation Point</b>	0.62 (Butyl Acetate=1)
<b>Flammable Limits - Upper</b>	10.9%
<b>Flammable Limits - Lower</b>	1.2%
<b>Vapor Pressure</b>	8.9 mmHg @ 20°C
<b>Vapor Density (Air=1)</b>	2.55(Air=1)
<b>Viscosity</b>	-

### SECTION X - STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions to Avoid:** Extreme heat and ignition sources.

**Hazardous Decomposition/Byproducts:** CO, CO<sub>2</sub>, and various hydrocarbons under combustion conditions.

**Hazardous Polymerization:** Will not occur.

**Polymerization Conditions to Avoid:** None

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#### SECTION XI - TOXICOLOGICAL INFORMATION

**Likely Route of Exposure:** Contact and inhalation; ingestion possible.

**Inhalation:** May cause irritation to the upper respiratory tract and CNS depression. Low to moderate degree of toxicity by inhalation.

**Eye Contact:** Causes eye irritation including stinging, watering and redness which may result in corneal injury.

**Skin Contact:** Contact may cause mild skin irritation including redness, burning and drying/cracking of the skin. No harmful effects from skin adsorption are expected.

**Ingestion:** Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia and edema. Moderate to high degree of toxicity by ingestion. May be harmful or fatal if swallowed.

**Toxicity:**

Component Name	LD50	LC50
Iso Butanol	Oral - Rat - 2,460 mg/kg - Dermal - Rabbit - 3,400 mg/kg	Inhalation - Rat - 4 h - 8000 ppm

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

#### SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicity:** Information not available.

**Mobility:** Information not available.

**Degradability:** Information not available.

**BioAccumulation:** Information not available.

#### SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert. Can be disposed of by controlled incineration. Excessive quantities should not be permitted to enter drains, sewers, or water courses. Empty containers should be air dried before disposing.

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**SECTION XIV - TRANSPORT INFORMATION**

**DOT SHIPPING INFORMATION**

**Proper Shipping Name:** Isobutanol

**Contains:**

**Hazard Class and Label:** 3

**Identification Number:** UN 1212

**Packaging Group:** III

**Label Required:**

**SECTION XV - REGULATORY INFORMATION**

**TSCA STATUS:**..... The components of this product are listed on the TSCA Inventory

**SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:**

No chemicals in this material are subject to the reporting requirements.

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:**

Acute	Chronic	Fire	Pressure	Reactive
X		X		

**SARA TITLE III SECTION 313 SUPPLIER INFORMATION:**

Component Name	CAS #	% by wt.
	78-92-2	100%

**CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:**

No chemicals in this material are subject to the reporting requirements.

**SECTION XVI - OTHER INFORMATION**

**HMIS Health:** ..... 2

**HMIS Flammability:** ..... 3

**HMIS Reactivity:** ..... 0

**Additional:**

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### Specification Information

**Department issuing data sheet:** Compliance

**Email address:** compliance@transcheminc.com

**Training necessary:** Follow all local, state and federal regulations

### Intended Use of Product:

Seller and manufacturer disclaim any implied or expressed warranties, including warranties of merchantability or fitness of this product for any particular purpose. In no event shall seller be liable for any claim for incidental or consequential damages arising out of or in connection with the sale, delivery, transportation or use of this product. Seller's and manufacturer's liability in all events is limited to, and shall not exceed the purchase price paid for this product.