207 Sandusky Street, Pittsburgh, PA 15212-5823 U.S.A. 412.323.4900

**Material Safety Data Sheet** 



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#### 1. Product identification

Product Name CL-TES 090 SOLVENT

Emergency telephone: INFOTRAC 24-hour telephone # 1-800-535-5053

### 2. Hazards Identification

Dangerhighly flammableState of matterliquid clearOdoralcoholic

Environmental precautions: Should not be released into the environment. Prevent further leakage or spillage if safe to do

so.

Potential health effects

**Acute effects** 

Eyes Causes eye irritation

**Skin** Prolonged or repeated skin contact with liquid may cause defatting resulting in drying redness and

possible blistering.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** Aspiration hazard if swallowed – can enter lungs and cause damages.

#### 3. Composition/Information on Ingredients

Components	CAS No.	Weight %
Ethyl alcohol	64-17-5	85%
Isopropyl alcohol	67-63-0	9%
Methanol	67-56-1	4%
Isobutyl methyl ketone	108-10-1	1%

#### 4. First Aid Measures

**Eye Contact:** Immediately flush eyes with plenty of flowing water for 15 minutes holding eyelids apart. Consult physician. **Skin Contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothing. Wash before reuse. If skin irritation persists, call a physician.

**Inhalation:** Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

### 5. Fire Fighting Measures

Flammability

Flash point 13° C
Autoignition temperature ~400 ° C
Explosion limits

 $\begin{array}{ccc} \text{Lower} & 4\% \ (\text{v}) \\ \text{Upper} & 20\% \ (\text{v}) \end{array}$ 

Fire/explosion Flash back possible over considerable distance

Hazardous combustion products Carbon oxides

Suitable extinguishing media
Protective measures

Water spray, alcohol resistant foam, dry chemical, carbon dioxide
Wear self-contained breathing apparatus and protective suit.

Further information Cool containers/tanks with water spray

# 6. <u>Accidental Release Measures</u>

**Personal precautions:** Keep away from and upwind of spill/leak. Remove all sources of ignition. Do not breath vapors or spray mist. Material can create slippery conditions.

**Environmental precautions:** Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Soak up with inert absorbent material and dispose of a hazardous waste.

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## 7. Handling and Storage

**Safe handling advice**: Provide fresh air. Wear personal protective equipment. Ensure all equipment is electrically grounded before beginning transfer operations.

Advice on protections against fire and explosion: Use explosion-proof equipment.

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place.

#### 8. Exposure Controls/Personal Protections

Engineering measures: Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment: Eyes: Safety glasses with side shields Skin: Protective suit; safety shoes

**Inhalation**: In case of insufficient ventilation, wear suitable respiratory equipment **Hygiene measures**: Wash hands before breaks and immediately after handling product

Protective measures: Wear suitable protective equipment

### **Exposure Guidelines**

#### Components Exposure limit(s)

Ethanol

US. ACGIH Threshold Limit Values time weighted average 1,000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 1,000 ppm (1,900 mg/m3)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 1,000 ppm (1.900 mg/m3)

US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 1,000 ppm (1,900 mg/m3) US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 300 ppm (885 mg/m3)

### Isopropyl Alcohol

US. ACGIH Threshold Limit Values time weighted average 200 ppm

US. ACGIH Threshold Limit Values Short term time exposure limit 400 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 400 ppm (980 mg/m3)

US. NIOSH: Pocket Guide to Chemical Hazards Short term exposure limit (REL): 500 ppm (1,225 mg/m3)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 400 ppm (980 mg/m3)

US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 400 ppm (980 mg/m3)

US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 500 ppm (1,2255 mg/m3)

# Methyl Alcohol

US. ACGIH Threshold Limit Values time weighted average 200 ppm

US. ACGIH Threshold Limit Values Short term time exposure limit 250 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 200 ppm (260 mg/m3)

US. NIOSH: Pocket Guide to Chemical Hazards Short term exposure limit (REL): 250 ppm (325 mg/m3)

### Methanol US. ACC

US. ACGIH Threshold Limit Values time weighted average 200 ppm

US. ACGIH Threshold Limit Values Short term time exposure limit 250 ppm

## Methyl Isobutyl Ketone

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 100 ppm (410 mg/m3)

US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 50 ppm

US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 750 ppm

PEL= Permissible Exposure Limits

TLV= Threshold Limit Value

EL= Excursion Limit

TW Time Weighted Average (8 hr.)
STEL= Short Term Exposure Limit (15 min.)
WEEL= Workplace Environmental Exposure Level

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SECTION 9 Physical and chemical properties

Color
Odor
alcoholic
Form
liquid
Boiling point/boiling range
74-80 °C
Flash point
13 °C
Lower explosion limit
4 %(V)
Upper explosion limit
20 %(V)

Vapor pressure ca. 66.661 hPa at 25 °C

Solubility miscible
Melting point/range -114 °C
Density 0.79 g/cm3

**SECTION 10 STABILITY AND REACTIVITY** 

Conditions to avoid Heat, flames and sparks

Hazardous decomposition products Carbon oxides

Incompatible products Strong oxidizing agents Incompatible with acids. Halogenated compounds

Hazardous reactions Hazardous polymerization does not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION** 

Acute oral toxicity Ethanol LD50 rat: 7,060 mg/kg; literature value

Methyl Isobutyl Ketone LD50 rat: 2,080 mg/kg; literature value

Methanol LD50 rat: 5,628 mg/kg

Acute inhalation toxicity Ethanol LC50 rabbit: 66,000 mg/l; literature; 4 h

**Isopropyl alcohol** LC50 rabbit: 16,000 mg/l; literature; 8 h

**Methanol** LC50 rat: 100 g/m3; literature

Acute dermal toxicity Ethanol LDLo rabbit: 20,000 mg/kg literature value

Methyl Isobutyl Ketone LDLo rabbit: 1,600 mg/kg literature value LDLo rabbit: 15,800 mg/kg literature value

**Skin irritation Isopropyl alcohol** rabbit: mild skin irritation: literature value

Methyl Isobutyl Ketone rabbit: mild skin irritation; literature value

**Eye irritation Isopropyl alcohol** rabbit: moderate eye irritation; literature value

Methyl Isobutyl Ketone rabbit: moderate eye irritation; literature value

**SECTION 12 DISPOSAL CONSIDERATIONS** 

Waste Classification US. EPA Resource Conservation and Recovery Act: (RCRA) D List of Characteristic Hazardous Wastes

(40 CFR 261.21-24): D001

Waste from residues / unused products In accordance with local and national regulations. .Do not contaminate ponds,

waterways or ditches with chemical or used container. The product should not be allowed to enter drains,

water courses or the soil.

Uncleaned empty packaging: Do not burn, or use a cutting torch on, the empty drum. Triple rinse containers., Can be offered for

recycling, re-conditioning or puncture.

**SECTION 13 TRANSPORT INFORMATION** 

DOT/49CFR
UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

ADR
UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

RID
UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

ADNR
UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

IMDG UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II, EmS F-E, S-D

ICAO/IATA UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

**SECTION 14 REGULATORY INFORMATION** 

**U.S. Federal Classifications:** 

OSHA Hazards Flammable Liquid, Mild eye irritant, Mild respiratory irritant

SARA 311/312 Fire Hazard, Acute Health Hazard

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**U.S. Regulated Ingredients:** Hazard information reporting

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313

Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components CAS-No.

Methanol 67-56-1 4-methypentan-2-one; isolbutyl methyl ketone 108-10-1

Inventories

EU list of existing chemical substances All chemical constituents are listed in: EU list of existing chemical

substances

**US TSCA Inventory** All chemical constituents are listed in: US TSCA Inventory \ Australian Inv. of Chem. Substances AICS

All chemical constituents are listed in: Australian Inv. of Chem.

Substances AICS

**Canadian Domestic Substances List DSL** All chemical constituents are listed in: Canadian Domestic

Substances List DSL

Jap. Inv. of Exist. & New Chemicals ENCS All chemical constituents are listed in: Jap. Inv. of Exist. & New

Chemicals ENCS

Korean Exist. Chemicals List ECL All chemical constituents are listed in: Korean Exist. Chemicals List ECL Philippines Inv. of Chem. Subst. PICCS

All chemical constituents are listed in: Philippines Inv. of Chem.Subst.

**PICCS** 

Inv. of Exist. Chem. Substances in China All chemical constituents are listed in: Inv. of Exist. Chem.

Substances in China

Other international regulations

WHMIS Classification B2: Flammable Liquid D2B: Toxic Material Causing Other Toxic Effects

## **SECTION 16 OTHER INFORMATION**

**Hazard Ratings** 

	Health	Fire	Reactivity Hazard
HMIS	1	3	0
NFPA	1	3	0

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