

Issue Date: 28-Aug-2014

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Version 2

## 1. IDENTIFICATION

<b>Product Name / Identifier</b>	<b>MIKE-O-CUT (OZONE-SAFE)</b>
<b>Other means of identification</b>	D-1104-05 D-1105-55
<b>Recommended Use</b>	Solvent Applications
<b>Restricted Use</b>	For Industrial Use only
<b>Supplier Address</b>	Ashburn Chemical Technologies 7403 Wright Rd Houston, TX 77041
<b>Company Phone Number</b>	832-399-1000
<b>Emergency Telephone (24 hr)</b>	INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

<b>Classification</b>	This chemical is considered hazardous by the OSHA HazCom 2012 (29CFR 1910.1200) and Canada's HPR (WHMIS 2015)	
	Skin irritation	Category 2
	Eye Irritation	Category 2
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1
	Specific Target Organ Toxicity (single exposure-Central Nervous System)	Category 3

**Signal Word** **DANGER**



<b>Hazard Statements</b>	H315 Causes skin irritation H319 Causes serious eye irritation H341 Suspected of causing genetic defects H350 May cause cancer H336 May cause drowsiness or dizziness
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**Precautionary Statements - Prevention**

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood  
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.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Precautionary Statements – Response**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash before reuse.

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do  
P338 Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Precautionary Statements – Storage**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**Precautionary Statements – Disposal**

P501 Dispose of contents and container in accordance with local, state, and national regulations.

**Other Hazard**

H412 Harmful to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Trichloroethylene	79-01-6	60-80

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST-AID MEASURES****First Aid Measures****General Advice**

Provide this SDS to medical personnel for treatment.

**Eye Contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice or attention

**Skin Contact**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If skin irritation persists, call a physician.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell

**Ingestion**

Do not induce vomiting without medical advice. Seek immediate medical attention/advice.

**Most important symptoms/ effects** Liquid or vapors may be irritating to skin and eyes.  
Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting,  
Symptoms of allergic reaction may include rash, itching, tingling of the hands and feet  
Acute inhalation of vapors may be narcotic or anesthetic.  
Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea.  
Possible cancer causing agent

**Notes to Physician** Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning.  
This product contains ingredients that may be anticipated to be a carcinogen

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Use water fog, foam, dry chemical, alcohol resistant foam or carbon dioxide (CO<sub>2</sub>)

**Unsuitable Extinguishing Media** None-known

**Specific Hazards Arising from the Chemical** Thermal decomposition can lead to release of irritating gases and vapors.  
Containers may explode when heated

**Hazardous Combustion Products** Oxides of carbon, chlorine, hydrogen chloride and phosgene.

**Protective equipment / Precautions for firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with skin or eyes.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
See SECTION 8 for Personal Protective Equipment.

**Environmental Precautions** Prevent entry into drains, waterways, rivers, lakes, sewers, basements or confined areas.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.  
See SECTION 12 for Ecological Information

**Methods for Containments & Clean-Up** Absorb or cover with dry earth, sand or other non-combustible material.  
Sweep up absorbed material and shovel into suitable containers for disposal.  
Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.  
See SECTION 13 for Waste Disposal

## 7. HANDLING AND STORAGE

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice.  
Avoid breathing fumes, vapors, mists, spray.  
Wash face, hands, and any exposed skin thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace  
See SECTION 8 for Personal Protection.  
See SECTION 2 for Precaution Statements.

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place.  
Do not store in open or unlabeled containers.  
Store away from heat and open flame. Storage temperature 5-40°C (41-104°F).

<b>Incompatible Materials</b>	Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.
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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

### Ingredient Information

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Trichloroethylene	TWA: 10 ppm STEL: 25 ppm BEI: 15 mg /l (urine) 0.5 mg/L (Blood)	Vacated) TWA: 270 mg/m <sub>3</sub> Ceiling: 200 ppm (Vacated) STEL: 200 ppm (Vacated) STEL: 1080 mg/m <sub>3</sub> TWA: 100 ppm Table Z-2	IDLH: 1000 ppm	TWA: 100 ppm TWA: 535 mg/m <sub>3</sub> STEL: 200 ppm STEL: 1080 mg/m <sub>3</sub>

**ACGIH:** American Conference of Governmental Industrial Hygienists

**OSHA:** Occupational Safety and Health Administration

**NIOSH:** National Institute for Occupational Safety and Health

**TWA:** Time weight average

**BEI:** Biological Exposure Indices

**STEL:** Short Term Exposure Limit

<b>Engineering Controls</b>	Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Ensure adequate ventilation, especially in confined area. Maintain eye wash fountain and quick-drench facilities in work area.
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<b>Personal Protective Equipment</b>	Safety glasses, Gloves, and Synthetic apron.
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<b>Respiratory Protection</b>	Wear NIOSH/MSHA approved organic vapor respiratory protection if used in confined, poorly ventilated areas.
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<b>General Hygiene Considerations</b>	Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Clear, colorless liquid
<b>Odor / Odor Threshold</b>	Chlorinated, solvent / 1 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting Point</b>	-85 °C / -121 °F	
<b>Boiling Point</b>	87° C / 188 °F	
<b>Freezing Point</b>	Not determined	
<b>Flammability</b>	Not determined	
<b>Flash Point</b>	Not determined	
<b>Auto-ignition Temperature</b>	410 °C / 770 °F	
<b>Upper / Lower Explosion Limit</b>	10.5 % vol (upper) / 8% vol (lower)	
<b>Vapor Pressure (mm Hg)</b>	58	@ 68°F / 20°C
<b>Vapor Density</b>	4.5	(Air = 1)
<b>Evaporation Rate</b>	0.69 (fast)	(Carbon Tetrachloride = 1)
<b>Specific Gravity</b>	1.40 -1.50	
<b>pH</b>	N/A	
<b>Solids</b>	0%	
<b>Water Solubility</b>	Slightly soluble in water	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	log Pow: 2.29 at 23 °C (73 °F)	n-Octanol/Water (K <sub>ow</sub> )
<b>Volatility Including Water</b>	Not determined	
<b>VOC Content (%)</b>	Not determined	

<b>Dielectric Strength (Volts)</b>	Not determined
<b>Decomposition Temperature</b>	> 150°C
<b>Explosive Properties</b>	Not determined

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	None known.
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Exposure to moist air or water.
<b>Incompatible Materials</b>	Strong oxidizing agents, Strong bases, Amines, Alkali metals, Metals.
<b>Hazardous Decomposition Product</b>	Oxides of carbon, chlorine, hydrogen chloride and phosgene.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Eye Contact</b>	Causes severe irritation, redness, tearing, pain, visual disturbance.
<b>Skin Contact</b>	Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.
<b>Inhalation</b>	Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.
<b>Ingestion</b>	Nausea, vomiting, headaches, abdominal pain, diarrhea, dizziness, pulmonary edema, unconsciousness or death, estimated fatal dose is 3-5 ml/kg

### *Component Information*

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Trichloroethylene	4290 mg/kg ( Rat ) 4920 mg/kg ( Rat )	> 20 g/kg ( Rabbit ) 29000 mg/kg ( Rabbit )	26 mg/L ( Rat ) 4 h

### Information on toxicological effects

<b>Skin sensitization</b>	No information available
<b>Aspiration Hazard</b>	No information available
<b>Reproductive Toxicity</b>	No data available
<b>Gem Cell Mutagenicity</b>	Laboratory experiments have shown mutagenic effects. In vitro tests have shown mutagenic effects.
<b>STOT- single exposure</b>	Central Nervous System (CNS): May cause drowsiness or dizziness
<b>STOT- repeated exposure</b>	Kidney, Liver, Blood
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS#	IARC	NTP	ACGIH	OSHA	Mexico
Trichloroethylene	79-01-6	Group 1	Reasonably Anticipated	A2	x	Not listed

**IARC: (International Agency for Research on Cancer)***Group 1 - Carcinogenic to Humans**Group 2A - Probably Carcinogenic to Humans**Group 2B - Possibly Carcinogenic to Humans***NTP: (National Toxicity Program) NTP: (National Toxicity Program)***Known - Known Carcinogen**Reasonably Anticipated - Reasonably Anticipated to be a Human**Carcinogen***ACGIH: (American Conference of Governmental Industrial****Hygienists)***A1 - Known Human Carcinogen**A2 - Suspected Human Carcinogen**A3 - Animal Carcinogen**ACGIH: (American Conference of Governmental Industrial Hygienists)***Mexico - Occupational Exposure Limits - Carcinogens***A1 - Confirmed Human Carcinogen**A2 - Suspected Human Carcinogen**A3 - Confirmed Animal Carcinogen**A4 - Not Classifiable as a Human Carcinogen**A5 - Not Suspected as a Human Carcinogen*

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains.

**Component Information**

The product contains following substances which are hazardous for the environment:  
Trichloroethylene CAS# 79-01-6

Freshwater Fish LC50	Freshwater Algae LC50	Microtox EC50	Water Flea EC50
LC50: 39 - 54 mg/L, 96h static (Lepomis macrochirus) LC50: 31.4 - 71.8 mg/L, 96h flow-through (Pimephales promelas))	175 mg/L, 96h (Pseudokirchneriella subcapitata) 450 mg/L, 96h (Desmodesmus subspicatus)	EC50 = 0.81 mg/L 24 h EC50 = 115 mg/L 10 min EC50 = 190 mg/L 15 min EC50 = 235 mg/L 24 h EC50 = 410 mg/L 24 h EC50 = 975 mg/L 5 min	2.2 mg/L, 48h (Daphnia magna)

**Persistence/Degradability**

Persistence is unlikely based on information available

**Bioaccumulation**

Does not bioaccumulate

**Mobility**

Trichloroethylene CAS# 79-01-6 log Pow: 2.29

**Other Ecological Hazard**

None known.

## 13. DISPOSAL CONSIDERATIONS

**Disposal of Wastes**

Dispose of in accordance with federal, state, and local regulations. Do not dump in sewers. Wrap container and place in trash collection, do not puncture, incinerate, or reuse container.

**RCRA-U Series Wastes**

U228 (Trichloroethylene)  
Product should be fully characterized prior to disposal (40 CFR 261)

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Trichloroethylene 79-01-6	U228	Included in waste streams: F001, F002, F024, F025, F039, K018, K019, K020	0.5 mg/L regulatory level	U228

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Trichloroethylene 79-01-6	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

**California Hazardous Waste Status** Trichloroethylene CAS# 79-01-6: Toxic

#### 14. TRANSPORT INFORMATION

##### DOT

UN/ID No UN1710  
Proper Shipping Name Trichloroethylene  
Hazard Class / Division 6.1, III  
Reportable Quantity (RQ) 100 Lbs

##### IATA

UN/ID No UN1710  
Proper Shipping Name Trichloroethylene  
Hazard Class / Division 6.1, III

##### IMDG

UN/ID No UN1710  
Proper Shipping Name Trichloroethylene  
Hazard Class / Division 6.1, III  
Marine Pollutant , EMS Code: F-A, S-A  
EMS: Emergency Response Procedures for Ships Carrying Dangerous Goods

#### 15. REGULATORY INFORMATION

##### International Regulations

All of the components in the product are on the following Inventory lists (X = listed)

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	INSQ	ENCS	IECSC	KECL
Trichloroethylene	x	x	-	201-167-4	-	x	x	x	x

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

*INSQ- Mexico National Inventory of Chemical Substances*

### US Federal Regulations

#### TSCA 12(b)

Trichloroethylene CAS No 79-01-6 Section 5

#### **EPCRA – Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quality**

This material contains a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Component	Hazardous Substances RQs	Reportable Quantity (RQ)
Trichloroethylene 79-01-6	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

#### **SARA 313 Reportable Ingredients**

The following components are subject to reporting levels established by SARA Title III, Section 313

Chemical Component	Wt %	SARA 313- Threshold value %
Trichloroethylene 79-01-6	60-80	0.1

#### **CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trichloroethylene 79-01-6	100 lb	X	X	X

#### **Clean Air Act**

Chemical Name	HAPS Data	Class 1 Ozon Depletors	Class 2 Ozon Depletors
Trichloroethylene	X	-	-

#### **U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island
Trichloroethylene 79-01-6	X	X	X	x



**California Prop 65:****Warning**

This material contains a chemical that is known to the state of California to cause cancer  
<https://www.p65warnings.ca.gov/>

Component	CAS No	CA Prop 65	Prop 65 NSRL	Category
Trichloroethylene	79-01-6	Carcinogen Developmental Male Reproductive	14 µg/day 50 µg/day	Developmental Carcinogen

**Other International Regulations****Canada WHMIS Classifications**

Class D-1B: Toxic material causing immediate and serious toxic effects

Class D-2A: Very Toxic Material causing other toxic effects

Class D2B: Toxic material causing other toxic effects

**Mexico Hazardous Waste**

Trichloroethylene CAS No 79-01-6

Very Toxic , Waste No T228

**Mexico NOM-018-TSPS-2000**

Trichloroethylene CAS No 79-01-6

Health Hazard: 2

Persistent, bioaccumulate, or risk of cancer

<b>16. OTHER INFORMATION</b>
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**NFPA****Health Hazards**

2

**Flammability**

0

**Instability**

0

**Special Hazards**

Not determined

**HMIS****Health Hazards**

2

**Flammability**

0

**Physical Hazards**

0

**Personal Protection**

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Revision Note:

Updated all sections

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**