

**Material Safety Data Sheet**

Revision date: 11.18.2008

Revision 1.10

REA-JET CL-TPKE Cleaner

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**24 HOUR EMERGENCY TELEPHONE NUMBERS: CHEMTREC DOMESTIC US/NORTH AMERICA 800-424-9300  
INTERNATIONAL (OUTSIDE US): 703-527-3887**

**SECTION 1 IDENTIFICATION OF THE SUBSTANCE**

**Trade name** **CL-TPKE Cleaner**  
**Product number** **IJ050-9009-13**  
**Synonyms** Methyl Ethyl Ketone, 2-Butanon, 3-Butanone, Methyl acetone, Ethyl methyl ketone

**SECTION 2 HAZARDS IDENTIFICATION**

**Emergency Overview**

<b>Danger</b>	Highly flammable.
<b>State of matter</b>	liquid colorless
<b>Odor</b>	mint-like

**Potential environmental effects**

**Environmental precautions:** Should not be released into the environment. Prevent further leakage or spillage if safe to do so.  
**Ecological information:** See chapter 12

**Potential health effects**

**Acute effects**  
**Eyes** Causes eye irritation.  
**Skin** Prolonged or repeated contact may dry skin and cause irritation  
**Inhalation** May cause respiratory tract irritation  
**Ingestion** Aspiration hazard if swallowed - can enter lungs and cause damage  
**Toxicological information:** See chapter 11

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS-No.</b>	<b>Weight %</b>
Butanone, ethyl methyl ketone	78-93-3	99.50

**Exposure limit(s):** See chapter 8

**Classification and hazard labeling:** See chapter 15

**SECTION 4 FIRST AID MEASURES**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician  
**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.  
**Inhalation** Move to fresh air in case of accidental inhalation of vapors. 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.

**SECTION 5 FIRE-FIGHTING MEASURES**

**Flammability**

**Flash point** -9 °C closed cup; 9 °C open cup  
**Auto ignition temperature** 515 °C

**Explosion limits** **Lower explosion limit:** 1.4 %(V)  
**Upper explosion limit:** 11.4 %(V)

**Fire/explosion** Vapors may form explosive mixtures with air. Flash back possible over considerable distance

**Hazardous combustion products** Carbon oxides  
**Suitable extinguishing media** Water spray  
Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media** No information available

**Protection measures and instructions** Wear self-contained breathing apparatus and protective suit.

**Further information** Cool containers / tanks with water spray.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions** Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapors or spray mist.

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

# PANNIER CORPORATION

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

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**Methods for cleaning up** Soak up with inert absorbent material and dispose of as hazardous waste.

**Exposure controls / personal protection:** See chapter 8

### SECTION 7 HANDLING AND STORAGE

**Safe handling advice** Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Take precautionary measures against static discharges. Ensure all equipment is electrically grounded before beginning transfer operations.

**Advice on protection against fire and explosion** Keep away from heat and sources of ignition. Use explosion-proof equipment

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

### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**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

**Hand protection** Gloves suitable for permanent contact:

Material: butyl-rubber

Break through time: 4 H

Material thickness: 0.5 mm

Unsuitable gloves:

Material: Polyvinylchloride, leather, nitrile rubber / nitrile latex

Natural rubber / natural latex.

**Hygiene measures** Wash hands before breaks and immediately after handling the product.

**Protective measures** Wear suitable protective equipment

#### Exposure Guidelines

##### Components Exposure limit(s)

###### 2-BUTANONE

US. ACGIH Threshold Limit Values time weighted average 200 ppm

US. ACGIH Threshold Limit Values Short term exposure limit 300 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 300 ppm (590 mg/m<sup>3</sup>)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 200 ppm (590 mg/m<sup>3</sup>)

US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 200 ppm (590 mg/m<sup>3</sup>)

US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 300 ppm (885 mg/m<sup>3</sup>)

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants Time Weighted Average (TWA)

Permissible Exposure Limit (PEL): 300 ppm (885 mg/m<sup>3</sup>)

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants Ceiling Limit Value:

300 ppm (885 mg/m<sup>3</sup>)

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. time weighted average 200 ppm (600 mg/m<sup>3</sup>)

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

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Color</b>	colorless
<b>Odor</b>	mint-like
<b>Form</b>	liquid
<b>Boiling point/boiling range</b>	79.6 °C
<b>Flash point</b>	-9 °C closed cup; 9 °C open cup
<b>Lower explosion limit</b>	1.4 %(V)
<b>Upper explosion limit</b>	11.4 %(V)
<b>Vapor pressure</b>	121.323 hPa at 25 °C
<b>Solubility</b>	partly miscible
<b>Viscosity</b>	0.51 mm <sup>2</sup> /s
<b>Viscosity, dynamic</b>	0.41 mPa.s
<b>Melting point/range</b>	-86.3 °C
<b>Density</b>	0.805 g/cm <sup>3</sup>

### SECTION 10 STABILITY AND REACTIVITY

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**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 polymerisation does not occur.

### SECTION 11 TOXICOLOGICAL INFORMATION

**Acute oral toxicity** Acetone: LD50 rat: 2,737 mg/kg; literature value  
**8Acute inhalation toxicity** Acetone: LC50 rat: 23,500 mg/l; literature value; 8 h  
**Acute dermal toxicity** Acetone: LD50 rabbit: 6,480 mg/kg; literature  
**Skin irritation** Acetone rabbit: moderately irritating; literature value  
**Eye irritation** Acetone rabbit: irritating; literature value  
Acetone: rabbit: irritating;

### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity effects**  
**Toxicity to fish** LC50 Bluegill sunfish: 4,467 mg/l; 96 h; literature value  
LC50Poecilia reticulata: 5,700 mg/l; 24 h; literature value  
**Toxicity to daphnia** LC50 Pimephales promelas: 3,200 mg/l; 96H; literature value  
**Toxicity to algae** EC50 Daphnia magna: < 520 mg/l; 48 h; literature value

### SECTION 13 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.  
**Handling and storage:** See chapter 7  
**Exposure controls / personal protection:** See chapter 8

### SECTION 14 TRANSPORT INFORMATION

**DOT/49CFR** UN 1193 Methyl ethyl ketone, 3, II  
**ADR** UN 1193 Methyl ethyl ketone, 3, II  
**RID** UN 1193 METHYL ETHYL KETONE, 3, II  
**ADNR** UN 1193 METHYL ETHYL KETONE, 3, II  
**IMDG** UN 1193 METHYL ETHYL KETONE, 3, II, EmS F-E, S-D  
**ICAO/IATA** UN 1193 Methyl ethyl ketone, 3, II

### SECTION 15 REGULATORY INFORMATION

#### U.S. Federal Classifications:

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

**SARA 311/312** Fire Hazard, Acute Health Hazard

#### 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

Butanone

#### CAS-No.

78-93-3

**US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)**

#### Components

Butanone

#### CAS-No.

78-93-3

**US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)**

#### Components

Butanone

#### CAS-No.

78-93-3

**US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)**

#### Components

Butanone

#### CAS-No.

78-93-3

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### US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### Spill reporting US. EPA CERCLA Hazardous Substances (40 CFR 302)

<u>Components</u>	<u>CAS-No.</u>	<u>Reportable Quantity</u>
Butanone	78-93-3	5,000 lbs.

### Health

### US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

<u>Components</u>	<u>CAS-No.</u>
Not listed	

### Inventories

#### EU list of existing chemical substances

All chemical constituents are listed in: EU list of existing chemical substances (See chapter 3)

#### US TSCA Inventory

All chemical constituents are listed in: US TSCA Inventory (See chapter 3)

#### Australian Inv. of Chem. Substances AICS

All chemical constituents are listed in: Australian Inv. of Chem. Substances AICS (See chapter 3)

#### Canadian Domestic Substances List DSL

All chemical constituents are listed in: Canadian Domestic Substances List DSL (See chapter 3)

#### Jap. Inv. of Exist. & New Chemicals ENCS

All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals ENCS (See chapter 3)

#### Korean Exist. Chemicals List ECL

All chemical constituents are listed in: Korean Exist. Chemicals List ECL (See chapter 3)

#### Philippines Inv. of Chem. Subst. PICCS

All chemical constituents are listed in: Philippines Inv. of Chem. Subst. PICCS (See chapter 3)

#### Inv. of Exist. Chem. Substances in China

All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China (See chapter 3)

### Other international regulations

WHMIS Classification B2: Flammable Liquid

D2B: Toxic Material Causing Other Toxic Effects

### SECTION 16 OTHER INFORMATION

#### Hazard Ratings

	<b>Health</b>	<b>Fire</b>	<b>Reactivity Hazard</b>
HMIS	1	3	0
NFPA	1	3	0

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