

UNUSUAL FIRE AND EXPLOSION HAZARDS: Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point
Flammable material.

SECTION V - HEALTH HAZARD DATA

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Breathing vapor may irritate the nose and throat. Central nervous system effects including excitation, euphoria, contracted eye pupil, dizziness, blurred vision, fatigue, nausea, headache, loss of consciousness, respiratory arrest and sudden death could occur of long term and/or high concentration exposures to vapors.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Contact with the skin or eyes may cause irritation. Prolonged or repeated contact can cause moderate irritation, defatting and/or dermatitis. Skin and eyes should be flushed with water for at least 15 minutes.

INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE: Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

HEALTH HAZARDS (ACUTE AND CHRONIC): Overexposure may cause anesthesia, headache, nausea or dizziness. Breathing the vapors may irritate the nose and throat. Detectable amounts of chemicals or substances known to the state of California to cause cancer, birth defects, or other reproductive harm may be found in this product. Use care when handling chemical and petroleum products even though they are water reducible.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT: Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

EMERGENCY AND FIRST AID PROCEDURES: Remove victim to fresh air and restore breathing if required. Call a physician if required. If breathing stops give artificial respiration. Keep person warm. Never give anything by mouth to an unconscious person. Do not induce vomiting. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lungs.

SECTION VI- REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Heat and fires. Ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID): strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strong with acids while in liquid form.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon monoxide, Carbon Dioxide,

HAZARDOUS POLYMERIZATION: N/A

SECTION VII- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Flush with water to a tank or to an opened well-ventilated area. Absorb or remove to container and dispose of properly in conformity with local government restrictions.

WASTE DISPOSAL METHOD: Incinerate if permitted or bury in a sanitary landfill. Consult a disposal expert. Dispose of in accordance with all local, state and federal laws. For highway or road spill, contact Chemtrec at (800)424-9300.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Handling Procedures

Avoid high temperatures that may elevate component pressure above container rating. Do not get into eyes; prevent contact with skin and clothing. Do not breathe dust. If product is placed in solution, take precautions to avoid breathing mists. When using, do not eat, drink, or smoke. Remove all contaminated clothing and wash before reuse. Wash thoroughly after handling.

Storage Procedures

Under normal conditions of storage and use of this product will not constitute a health hazard. However if released, being heavier than air, this product may collect in any confined space and may reach concentrations presenting an asphyxiation or safety hazard and may be ignited by pilot lights, other flames, sparks, heaters electric motors, static discharge, or other sources of ignition.

Direct contact of the skin with this product may cause frostbite or cold burns and containers may present a similar hazard when gas is being withdrawn, due to the cooling effect. Handling precautions should be strictly observed.

If a tank fire occurs, the potential always exists for an explosion known as boiling liquid expanding vapor explosion (BLEVE). To reduce this risk, fire departments, fire fighters, and tank owners and users should follow the recommendations below.

This product is stored under pressure at ambient temperatures or as a refrigerated liquid. The design of pressure vessels, fuel systems, safety devices and operating procedures must comply with recognized codes of good practice. Small containers e.g. cylinders of approved design, properly sealed and in good condition, should be stored outdoors or in well ventilated storerooms, at no lower than ground level and must be quickly removable in an emergency. Eliminate all sources of ignition from the storage area. Instruct personnel handling this product in potential hazards and precautions, and train them in safe handling and emergency procedures.

Flammable: Keep away from source of heat or flame. Avoid eye or skin contact.

OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of vapor. Keep containers tightly closed. Replace all bungs tightly before shipping or storing.

SECTION VIII- SPECIAL PROTECTION INFORMATION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Acetone	500 ppm TWA; 750 ppm STEL	250 ppm TWA; 590 mg/m ³ TWA 2500 ppm IDLH (10% LEL)	1000 ppm TWA; 2400 mg/m ³ TWA

OSHA Vacated PELs: Acetone: 750 ppm TWA; 1800 mg/m³ TWA

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear butyl rubber gloves, apron, and/or clothing.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A NIOSH/MSHA approved or European Standard EN 149 air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected.

RESPIRATORY PROTECTION: Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits use a NIOSH approved respirator to prevent overexposure.

VENTILATION: Use explosion proof ventilation as required to control particulate and any minor vapor concentrations. A spray booth is recommended.

PROTECTIVE GLOVES: Use rubber or neoprene gloves. Use gloves that will resist the product.

EYE PROTECTION: Goggles or face shield.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Avoid contact with eyes. Wear eye protection devices. If required wear chemical resistant gloves and other clothing.

WORK/ HYGIENIC PRACTICES: Wash hands with soap and water before eating. Dispose of contaminated clothing as soon as possible.

SECTION IX – TOXICOLOGICAL INFORMATION

N,N-Dimethyl-p-toluidine (CAS#99-97-8): RTECS#: CAS# 99-97-8: XU5803000

Carcinogenicity: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact.

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute toxicity of the vapor (LC50): 1400 mg/m³ 4 hours [Rat]. 3

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. May be harmful if absorbed through skin. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. May affect respiration (dyspnea, respiratory stimulation). Harmful if inhaled. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea. Harmful if swallowed. The toxicological properties of this substance have not been fully investigated. Chronic Potential Health Effects: There is a danger of cumulative effects.

Acetone (CAS#67-64-1) : LD50/LC50: Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, eye: 10 uL Mild; Draize test, rabbit, skin: 500 mg/24H Mild; nhalation, mouse: LC50 = 44 gm/m³/4H; Inhalation, rat: LC50 = 50100 mg/m³/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: In a series of studies, no statistically significant differences in causes of death or clinical laboratory results were observed in 948 employees exposed to up to 1070 ppm acetone over 23 years. Teratogenicity: Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. Reproductive Effects: During the Stewart et al. study, four adult female volunteers were exposed 7.5 hours to acetone vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the acetone exposure. Mutagenicity: Sex chromosome loss and nondisjunction(Yeast - Saccharomyces cerevisiae) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L. Neurotoxicity: No information found.

Petroleum gases, liquefied, sweetened (CAS#68476-86-8): Acute Dose Effects Component Analysis - LD50/LC50 No LD50/LC50's are available for this product's components. **Carcinogenicity - Component Carcinogenicity** None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

SECTION X – ECOLOGICAL INFORMATION

N,N-Dimethyl-p-toluidine (CAS#99-97-8): Ecotoxicity: Not available. **BOD5 and COD:** Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. **Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself. **Special Remarks on the Products of Biodegradation:** Not available.

Acetone (CAS#67-64-1) : Ecotoxicity: Fish: Rainbow trout: 5540 mg/l; 96-hr; LC50Fish: Bluegill/Sunfish: 8300 mg/l; 96-hr; LC50 No data available. Environmental: Volatilizes, leeches, and biodegrades when released to soil. TERRESTRIAL FATE: If released on soil, acetone will both volatilize and leach into the ground. Acetone readily biodegrades and there is evidence suggesting that it biodegrades fairly rapidly in soils. AQUATIC FATE: If released into water, acetone will probably biodegrade. It is readily biodegradable in screening tests, although data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to sediment should not be significant. Physical: ATMOSPHERIC FATE: In the atmosphere, acetone will be lost by photolysis and reaction with photochemically produced hydroxyl radicals. Half-life estimates from these combined processes are 79 and 13 days in January and June, respectively, for an overall annual average of 22 days. Therefore considerable dispersion should occur. Being miscible in water, wash out by rain should be an important removal process. This process has been confirmed around Lake Shinsei-ko in Japan. There acetone was found in the air and rain as well as the lake.

Petroleum gases, liquefied, sweetened (CAS#68746-86-8): Ecotoxicity - Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.

SECTION XI – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XII – TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: CPH 707 Accelerator for Cyanoacrylate Glue
PRIMARY HAZARD CLASS/DIVISION: 3
UN/UA NUMBER: UN 1090, Acetone
PACKING GROUP: II

SECTION XIII – REGULATORY INFORMATION

N,N-Dimethyl-p-toluidine (CAS#99-97-8): US Federal

TSCA CAS# 99-97-8 is listed on the TSCA Inventory.

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

HMIS (U.S.A.): Health Hazard: 2 Fire Hazard: 2 Reactivity: 0 Personal Protection: H

National Fire Protection Association (U.S.A.):

Health: 2 Flammability: 2 Reactivity: 0 Specific hazard:

Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 28A After contact with skin, wash immediately with plenty of water.

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 99-97-8: 1

Canada

CAS# 99-97-8 is listed on Canada's DSL List

Acetone (CAS#67-64-1) : is listed on the TSCA inventory. CERCLA Hazardous Substances and corresponding RQs = 5000 lb final RQ; SARA Section 302 Extremely Hazardous Substances = None. SARA Codes: immediate, fire. Section 313: No. Clean Air Act: No. Clean Water Act: No. OSHA: No. California Prop 65: No.

European/International Regulations: European Labeling in Accordance with EC Directives:

Hazard Symbols: XI F

Risk Phrases:

R 11 Highly flammable.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 9 Keep container in a well-ventilated place.

is listed on Canada's DSL List.

Canada – WHMIS Class B2, D2B.

has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

is listed on the Canadian Ingredient Disclosure List.

Petroleum gases, liquefied, sweetened (CAS#68476-86-8):

US Federal Regulations

Component Analysis

None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

A: General Product Information

GRAS List:

The components of our propellants (propane, isobutane and normal butane) are listed on the **Generally Recognized As Safe (GRAS)** List, Part 184, Sub-Part B, Sec. 184.1165 and 184.1655 (Code of Federal Regulations).

STATEMENT OF BIODEGRADABILITY

The degradation of the NGL propellants does not take place by way of biological organisms. These are gases at atmospheric pressure and ambient temperature and their atmospheric life is measured in a matter of days. The degradation of the NGL propellants is accomplished **via photolysis**.

B. Component Analysis – Inventory **TSCA:** Yes **CAN:** DSL **EEC:** EINECS

SECTION XIV- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.