



Material Safety Data Sheet

Diethyl pyrocarbonate

MSDS# 44762

Section 1 - Chemical Product and Company Identification

MSDS Name: Diethyl pyrocarbonate
Catalog Numbers: AC170250000, AC170250050, AC170250250, AC170251000, BP2515-100, BP2515-25, BP2515-5, BP2515-50
Synonyms: DEPC; Diethyl oxydiformate; Ethoxyformic anhydride; Pyrocarbonic acid diethyl ester.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 1609-47-8
Chemical Name: Diethyl pyrocarbonate
%: 97
EINECS#: 216-542-8

Hazard Symbols: XN



Risk Phrases: 20/22 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Combustible liquid and vapor. Moisture sensitive. Harmful if inhaled or swallowed. Containers may develop pressure. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation. Causes redness and pain.

Skin: Causes skin irritation. Causes redness and pain. May be harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea and vomiting.

Inhalation: Harmful if inhaled. Causes respiratory tract irritation.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Combustible liquid and vapor.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not applicable.

Flash Point: 69 deg C (156.20 deg F)

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 2; flammability: 2; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Contents are under pressure. Do not expose to heat or store above recommended temperatures. Store in a tightly closed container. Store in a dry area. Keep refrigerated. (Store below 4°C/39°F.) Store under nitrogen.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Diethyl pyrocarbonate	none listed	none listed	none listed

OSHA Vacated PELs: Diethyl pyrocarbonate: None listed

Engineering Controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

- Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: colorless - light amber
Odor: sweet, fruity odor
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: 1.97 cP @ 20 deg C
Boiling Point: 93 - 94 deg C @ 18 mmHg
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Decomposes.
Specific Gravity/Density: 1.118
Molecular Formula: C6H10O5
Molecular Weight: 162.14

Section 10 - Stability and Reactivity

Chemical Stability: Unstable in the presence of moisture. Heat sensitive
Conditions to Avoid: Incompatible materials, ignition sources, exposure to moist air or water, temperatures above 40°C.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, strong bases, ammonia.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, ethyl alcohol.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 1609-47-8: LQ9350000
RTECS:
CAS# 1609-47-8: Oral, mouse: LD50 = 1558 mg/kg;
LD50/LC50: Oral, rabbit: LD50 = 500 mg/kg;
Oral, rat: LD50 = 850 mg/kg;
Other: Inhalation LCLo rat: 10000 mg/m3/1H.
Carcinogenicity: Diethyl pyrocarbonate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not Regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

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

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 1609-47-8: Not available

Canada

CAS# 1609-47-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D1B, D2B

This product 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.

CAS# 1609-47-8 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 1609-47-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 10/01/1997

Revision #9 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
