

Ethylene C2H4-MSDS

Name: Ethylene

Synonym:

CAS.: 74-85-1

Section 1 - Chemical Product

MSDS Name: Ethylene 聽

Synonym:

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	emsds	EINECS#
74-85-1	Ethylene	100.0	200-815-3
Hazard Symbols: F+			
Risk Phrases: 12			

Section 3 - HAZARDS IDENTIFICATION

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

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 4 - FIRST AID MEASURES

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

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Get medical aid.

Notes to Physician:

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 form an explosive mixture with air.

Vapors can travel to a source of ignition and flash back. Flammable Gas. Can form explosive mixtures at or above the flash point. Use water spray to keep fire-exposed containers cool. Will be easily ignited by heat, sparks or flame. Containers may explode if exposed to fire. Vapors from liquefied gas are initially heavier than air and spread along ground.

Extinguishing Media:

For large fires, use water spray or fog. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out. For small fires, use dry chemical or carbon dioxide. **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.** Do not direct water at source of leak or safety devices; icing may occur.

Section 6 - ACCIDENTAL RELEASE MEASURES

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

Spills/Leaks:

Remove all sources of ignition. Isolate area and deny entry. Provide ventilation. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Stop leak only if you can do so without risk. Use water spray to reduce vapors or divert vapor cloud drift.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Use with adequate ventilation.

Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store below 50°C.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 74-85-1: Russia: 100 mg/m³ TWA 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:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Gas

Color: colorless

Odor: sweetish odor

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: -103 deg C

Freezing/Melting Point: -169 deg C

Autoignition Temperature: 425 deg C (797.00 deg F)

Flash Point: Not available.

Explosion Limits, lower: 2.7

Explosion Limits, upper: 34

Decomposition Temperature:

Solubility in water:

Specific Gravity/Density: 0.57

Molecular Formula: C₂H₄

Molecular Weight: 28.028

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable.

Conditions to Avoid:

High temperatures, incompatible materials, ignition sources.

Incompatibilities with Other Materials:

Oxidizing agents Hazardous Decomposition Products:

Carbon monoxide.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 74-85-1: KU5340000 LD50/LC50:

CAS# 74-85-1: Inhalation, mouse: LC50 = 95 ppm/2H.

Carcinogenicity:

Ethylene - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - TRANSPORT INFORMATION

IATA

No information available.

IMO

No information available.

RID/ADR

No information available.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F+

Risk Phrases:

R 12 Extremely flammable.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

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

S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 74-85-1: 0

Canada

CAS# 74-85-1 is listed on Canadas DSL List.

CAS# 74-85-1 is not listed on Canadas Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 74-85-1 is listed on the TSCA inventory.