

INTERNATIONAL_GASES_AND_CHEMICALS_LTD

MATERIAL SAFETY DATA SHEETS

DATE: 11/21/00

SUPPLIER ADDRESS: SPEEDWELL RD
PARKHOUSE EAST
NEWCASTLE-U-LYME

EMERGENCY PHONE: (178) 256-5556
NUMBER

1. CHEMICAL PRODUCT

PRODUCT NAME: DIMETHYLACETYLENE

SYNONYMS: 2-Butyne, Crotonlyene

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient Name	Formula	CAS#	Concentration	Exposure Limits (PPM)			
				ACGIH TLV	OSHA PEL	MAC	Other STEL
DIMETHYLACETYLENE	C4H6	503-17-3	99+%	NE	NE	NE	NE

Note: NE = NONE ESTABLISHED

3. HAZARD IDENTIFICATION

*** EMERGENCY OVERVIEW ***

Flammable liquid and vapor.

Can form explosive mixtures with air.

Can cause irritation to eyes, skin and respiratory tract.

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Inhalation , Ingestion

ACUTE EFFECTS: Material acts as a simple asphyxiant by displacing air necessary for life. Can be irritating to the eyes, skin, and respiratory tract.

CHRONIC EFFECTS: None known

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None known

OTHER EFFECTS OF OVEREXPOSURE: None

CARCINOGENICITY (US Only):

NTP - No

IARC MONOGRAPHS - No

OSHA REGULATED - No

Continued ...

4. FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration.

EYE CONTACT: Immediately flush with copious amounts of water for at least 15 minutes.

SKIN CONTACT: Immediately flush with copious amounts of water for at least 15 minutes while removing contaminated clothing.

INGESTION: Wash out mouth with water. Contact physician immediately.

IN EVENT OF EXPOSURE, CONSULT A PHYSICIAN

NOTE TO PHYSICIAN: None

5. FIRE FIGHTING MEASURES

FLASH POINT: -37 deg. C

AUTOIGNITION TEMPERATURE: N/Av

FLAMMABLE LIMITS:

LOWER: 1.4

UPPER: N/Av

EXTINGUISHING MEDIA: Carbon dioxide, foam, or dry chemical. Water may be effective for cooling cylinders, but may not effect extinguishment.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray.

HAZARDOUS COMBUSTION PRODUCTS: Toxic carbon monoxide may be given off during combustion.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Cylinder rupture may occur under fire conditions. May form explosive mixture in air. Vapors may travel a considerable distance to the source of ignition and flash back.

6. ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: Evacuate and ventilate area. Remove all sources of ignition. Cover with an activated carbon adsorbent, take up, and place in closed containers for disposal.

SPECIALIZED EQUIPMENT: None

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Use spark-proof tool and explosion-proof equipment. Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in well ventilated areas. Keep valve protection cap on cylinders when not in use. Store away from heat, flame, and sparks.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate general and local exhaust ventilation to maintain concentrations below flammable limits.

PERSONAL PROTECTION

EYE/FACE PROTECTION: Goggles. A safety shower and eyewash station should be readily available.

SKIN PROTECTION: Wear suitable protective clothing.

RESPIRATORY PROTECTION: Use a self-contained breathing apparatus in case of emergency or non-routine use.

OTHER PROTECTIVE EQUIPMENT: Safety shoes when handling cylinders.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless

ODOR: Odorless

PHYSICAL STATE: Liquid

VAPOR PRESSURE: @20 deg. C: 11.47 psi

VAPOR DENSITY (AIR=1): 1.91

BOILING POINT (C): 27

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SOLUBILITY IN WATER: N/Av
SPECIFIC GRAVITY (H2O=1): 0.691
EVAPORATION RATE: N/Av
ODOR THRESHOLD: N/Av

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

CONDITIONS TO AVOID: Sparks, flame, heat and other sources of ignition.

MATERIALS TO AVOID: Oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: Toxic carbon monoxide.

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): NONE ESTABLISHED

LETHAL DOSE 50 (LD50): N/Ap

TERATOGENICITY: N/Ap

REPRODUCTIVE EFFECTS: N/Ap

MUTAGENICITY: N/Ap

12. ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste can be burned in an approved incinerator equipped with an afterburner and scrubber. Return cylinders to supplier with any valve outlet plugs or caps secured and valve protection cap in place. Follow federal, state and local regulations. Non-returnable cylinders must not be refilled. Dispose of non-refillable cylinders in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

CONCENTRATION: 99+%

DOT DESCRIPTION (US ONLY):

PROPER SHIPPING NAME: Crotonylene

HAZARD CLASS: 3 (flammable), Packing group I

IDENTIFICATION NUMBER: UN1144

REPORTABLE QUANTITIES: None

LABELING: FLAMMABLE LIQUID

ADR/RID (EU Only): Class 3, 1(a)

SPECIAL PRECAUTIONS: Cylinders should be transported in a secure upright position in a well ventilated truck.

15. REGULATORY INFORMATION

OSHA: Process Safety Management: Material is not listed in appendix A of 29 CFR 1910.119 as highly hazardous chemical.

TSCA: Material is listed in TSCA inventory.

SARA: The threshold planning quantity for material is 10,000 lbs.

EU NUMBER: 207-962-2

NUMBER IN ANNEX 1 OF DIR 67/548: Not listed in annex 1.

EU CLASSIFICATION: N/Av

R: 36/37/38

S: 16,33,26,37/39

16. OTHER INFORMATION

OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS:

N/Ap - Not Applicable

N/Av - Not Available

SA - Simple Asphyxiant

NE - None Established

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