



Material Safety Data Sheet

1. Product and Company Identification

Product name : **2-Methyl-2-Butene**

Chemical formula : C₅H₁₀

Synonyms : 2-n-Amylene, Trimethylene

Company : Specialty Gases of America, Inc
6055 Brent Dr.
Toledo, OH 43611

Telephone : 419-729-7732

Emergency : 800-424-9300

2. Composition/Information on Ingredients

Components	CAS Number	% Volume
2-Methyl-2-Butene	513-35-9	99+%

3. Hazards Identification

Emergency Overview

Flammable liquid and vapor.
Can form explosive mixtures with air.
May cause irritation to eyes, skin and mucous membrane.
May cause irritation to respiratory tract.

Potential Health Effects

Routes of entry : Inhalation, ingestion.

Acute effects : Material acts as a simple asphyxiant by displacing air necessary for life. Vapor can be toxic by inhalation causing irritation to the respiratory system, eyes, and mucous membranes. Symptoms include rapid respiration, muscular incoordination, and vomiting. Prolong exposure may cause narcosis, nausea and headache.

Chronic effects : None known.

Medical conditions aggravated by overexposure : None known.

Other effects of overexposure : None known.

4. First Aid Measures

General advice : None.

Eye contact : Immediately flush with copious amount of water for at least 15 minutes.

Skin contact : Flush affected area with tepid water. Immediately remove contaminated clothing.

Ingestion : Contact physician immediately.

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

5. Fire-Fighting Measures

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

Specific 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. Dangerous fire hazard and moderate explosion hazard when heated.

Special protective equipment for fire-fighters : Wear self contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray.

6. Accidental Release Measures

Personal precautions : None.

Environmental precautions : None.

Methods for cleaning up : Evacuate and ventilate area. Remove all sources of heat and ignition. Absorb spills using a solid absorbent such as vermiculite.

Additional advice : None.

7. Handling and Storage

Handling

Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

Storage

Store in well ventilated areas. Keep valve protection cap on cylinders when not in use. Store away from heat, flame and sparks. Keep away from oxidizing agents.

8. Exposure Controls / Personal Protection

Engineering measures

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

Personal protective equipment

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

Hand protection : Protective gloves.

Eye protection : Goggles. A safety shower and eyewash station should be readily available.

Skin and body protection : Wear suitable protective clothing. Safety shoes when handling cylinders.

Special instructions for protection and hygiene : None.

Remarks : None.

9. Physical and Chemical Properties

Form : Liquid.

Color : Colorless.

Odor : Disagreeable odor.

Vapor pressure : @ 21.6 deg. C: 400 mm Hg

Vapor density : Not available.

Boiling point (C) : 30.1
Water solubility : @ 20 deg. C: 2.42
Specific gravity : @ 20 deg. C: 643 (H2O = 1).
Evaporation rate : Not available.

10. Stability and Reactivity

Stability : Stable under normal conditions.
Conditions to avoid : Sparks, flame, heat and other sources of ignition.
Materials to avoid : Oxidizing agents. Acids.
Hazardous decomposition products : Toxic carbon monoxide.

11. Toxicological Information

Acute Health Hazard

Ingestion : Not available.
Inhalation : Not available.
Skin : Not available.

12. Ecological Information

No adverse ecological effects are expected.

13. Disposal Considerations

Waste from residues / unused products : Dispose of non-refillable cylinders in accordance to federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined area or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place. Waste material may be burned in a controlled manner in an approved incinerator.
Contaminated packaging : Return cylinder to supplier.

14. Transport Information

DOT (US only)

Proper shipping name : 2-Methyl-2-Butene
Class : 3, Packing Group II
UN/ID No. : UN2460
Labeling : Flammable liquid

Further information

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

15. Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es)

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.

Number in Annex 1 of DIR 67/548

Not listed in annex 1.

16. Other Information

Prepared by : Specialty Gases of America, Inc.

For additional information, please visit our website at www.americangasgroup.com.