



Material Safety Data Sheet

1. Product and Company Identification

Product name : **2-Methylpentane**

Chemical formula : (C-H₃)₂-C-H-(C-H₂)₂-C-H₃

Synonyms : Isohexane, Pentane, 2-Methyl, 1,2-Dimethylbutane, Dimethylpropylmethane:
UN 1208

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-Methylpentane	107-83-5	100%

3. Hazards Identification

Emergency Overview

Flammable liquid and vapor. Vapor may cause flash fire.
May cause respiratory tract irritation, skin irritation, eye irritation, central nervous system depression.

Potential Health Effects

Inhalation : Irritation, nausea, vomiting, headache, symptoms of drunkenness.

Eye contact : Irritation.

Skin contact : Irritation.

Ingestion : Nausea, vomiting, symptoms of drunkenness. May cause kidney damage in long term exposure.

Chronic Health Hazard : Not applicable.

4. First Aid Measures

General advice : None.

Eye contact : Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Skin contact : Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing before reuse.

Ingestion : Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

Inhalation : If adverse effects occur, remove to uncontaminated area. Give artificial

respiration if not breathing. Get immediate medical attention.
Note to physicians : For ingestion, consider gastric lavage.

5. Fire-Fighting Measures

Suitable extinguishing media : Carbon dioxide, regular dry chemical, water, regular foam.
Large fires: Use regular foam or flood with fine water spray.
Specific hazards : Severe fire hazards. Severe explosion hazard. The gas is heavier than air. Vapor or gases may ignite at distant ignition sources and flash back. Vapor/ air mixtures are explosive.
Fire fighting : Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Water may be ineffective.

6. Accidental Release Measures

Occupational spill/release : Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible materials. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Remove sources of ignition. Keep unnecessary people away. Isolate hazard area and deny entry.
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 accordance with all current regulations and standards. Subject to storage regulation: U.S. OSHA 29 CFR 1910.106. Grounding and bonding required. Keep separated from incompatible substances. Store in a tightly closed container. Store in a dry, cool place. Store in a well-ventilated area.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH : 500 ppm TWA (other than n-Hexane)
1000 ppm STEL (other than n-Hexane)
OSHA (vacated) : 1000 ppm STEL; 3600 mg/m³ STEL
500 ppm TWA; 1800 mg/m³ TWA
NIOSH : 100 ppm TWA other than n-Hexane; 350 mg/m³ TWA other than n-Hexane
510 ppm Ceiling other than n-Hexane 15 min; 1800 mg/m³ Ceiling other than n-Hexane 15 min

Engineering measures/Ventilation

Provide local exhaust or process enclosure ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

Personal protective equipment

Respiratory protection	:	The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA. 1000 ppm – Any supplied-air respirator. 2500 ppm – Any supplied-air respirator operated in a continuous-flow mode. 5000 ppm – Any supplied-air respirator with a tight-fitting facepiece that is operated in a continuous-flow mode. Any self-contained breathing apparatus with a full facepiece. Any supplied-air respirator with a full facepiece. Emergency or planned entry into unknown concentrations or IDLH conditions – Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Escape – Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister. Any appropriate escape-type, self-contained breathing apparatus.
Hand protection	:	Wear appropriate chemical resistant gloves.
Eye protection	:	Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
Skin and body protection	:	Wear appropriate chemical resistant clothing.

9. Physical and Chemical Properties

Form	:	Liquid.
Color	:	Colorless.
Odor	:	Not available.
Molecular weight	:	86.18
Vapor pressure	:	400 mmHg @ 42°C
Vapor density	:	3.0 (air = 1)
Specific gravity	:	0.6532 (water = 1)
Boiling point	:	140°F (60°C)
Melting point	:	-245°F (-154°C)
Water solubility	:	Insoluble.
Solvent solubility	:	Soluble: alcohol, ether, acetone, chloroform.

10. Stability and Reactivity

Stability	:	Stable under normal conditions.
Conditions to avoid	:	Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.
Materials to avoid	:	Oxidizing materials.
Hazardous decomposition products	:	Thermal decomposition products: oxides of carbon.

11. Toxicological Information

The components of this material have been reviewed in various sources and no selected endpoints have been published.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, OSHA or DFG.

Local Effects

2-METHYLPENTANE : Irritant: inhalation, skin, eye
(107-83-5)

Target Organs

2-METHYLPENTANE : Central nervous system
(107-83-5)

Additional Data

Stimulants such as epinephrine may induce ventricular fibrillation.

12. Ecological Information

No LOEL ecotoxicity data are available for this product's components.

13. Disposal Considerations

Waste from residues : Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste
/ unused products Number(s): D001. Dispose in accordance with all applicable regulations.
Contaminated : Return cylinder to supplier.
packaging

14. Transport Information

DOT (US only)

Proper shipping name : Hexanes
Class : 3, Packing Group II
UN/ID No. : UN1208
Labeling : Flammable Liquid

15. Regulatory Information

U.S. Federal Regulations

None of this product's components are listed under SARA Section 302/304 (40 CFR 355 Appendix A), SARA 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute: Yes
Chronic: No
Fire: Yes
Reactive: No
Pressure: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
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2-METHYLPENTANE (related to: Hexane isomers)	107-83-5	Yes	Yes	Yes	Yes	Yes	No
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Not regulated under California Proposition 65.

16. Other Information

Prepared by : Specialty Gases of America, Inc.

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