Material Safety Data Sheet

3-Methyl Pentane

Section 1. Chemical product and company identification

Product Name : 3-Methyl Pentane

Supplier : AIRGAS INC., on behalf of its subsidiaries
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

Synonym : 3-methylpentane; 3-methylpentane (dot); un 1208 (dot); un 2462 (dot)

MSDS# : 001123

Date of Preparation/Revision : **11/2/2006.**

In case of emergency : 1-866-734-3438

Section 2. Hazards identification

Physical state : Liquid. (CLEAR LIQUID WITH MILD, GASOLINE-LIKE ODOR)

Emergency overview : Danger!

HIGHLY FLAMMABLE LIQUID AND VAPOR.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.
VAPOR MAY CAUSE FLASH FIRE.

Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation.

Routes of entry : Dermal contact. Inhalation.

Potential acute health effects

Eyes : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Potential chronic health effects : **CARCINOGENIC EFFECTS** Not available.
MUTAGENIC EFFECTS Not available.
TERATOGENIC EFFECTS Not available.

Medical conditions aggravated by overexposure : Repeated or prolonged exposure is not known to aggravate medical condition.

See toxicological Information (section 11)

Section 3. Composition, Information on Ingredients

United States

3-methylpentane	96-14-0	100	**Exposure limits**

ACGIH TLV (United States, 1/2005). Notes: Substances for which there is a Biological Exposure Index or Indices Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.
STEL: 3500 mg/m^3 15 minute(s). Form: All forms
STEL: 1000 ppm 15 minute(s). Form: All forms
TWA: 1760 mg/m^3 8 hour(s). Form: All forms
TWA: 500 ppm 8 hour(s). Form: All forms
NIOSH REL (United States, 12/2001).

CEIL: 1800 mg/m^3 15 minute(s). Form: All forms
CEIL: 510 ppm 15 minute(s). Form: All forms
TWA: 350 mg/m^3 10 hour(s). Form: All forms
TWA: 100 ppm 10 hour(s). Form: All forms

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Section 5. Fire fighting measures

Flammability of the product : Flammable.

Auto-ignition temperature : 277.85°C (532.1°F)

Flash point : Closed cup: -6.15°C (20.9°F).

Flammable limits : Lower: 1.2% Upper: 7%

Products of combustion : These products are carbon oxides (CO, CO_2).

Fire fighting media and instructions : In case of fire, use water spray (fog), foam, dry chemicals, or CO_2.

Highly flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Special protective equipment for fire-fighters : Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Do not touch or walk through spilled material.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

Handling : Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Storage : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls, Personal Protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal protection in case of a large spill : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product name	Exposure limits
United States	
3-methylpentane	**ACGIH TLV (United States, 1/2005). Notes: Substances for which there is a Biological Exposure Index or Indices Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.** STEL: 3500 mg/m^3 15 minute(s). Form: All forms STEL: 1000 ppm 15 minute(s). Form: All forms TWA: 1760 mg/m^3 8 hour(s). Form: All forms TWA: 500 ppm 8 hour(s). Form: All forms **NIOSH REL (United States, 12/2001).** CEIL: 1800 mg/m^3 15 minute(s). Form: All forms CEIL: 510 ppm 15 minute(s). Form: All forms TWA: 350 mg/m^3 10 hour(s). Form: All forms TWA: 100 ppm 10 hour(s). Form: All forms

Section 9. Physical and chemical properties

Physical state : Liquid. (CLEAR LIQUID WITH MILD, GASOLINE-LIKE ODOR)

Molecular weight : 86.2 g/mole

Molecular formula : C6H14

Boiling/condensation point : 64.01°C (147.2°F)

Melting/freezing point : -153.89 to -100°C (-245 to -148°F)

Specific gravity : 0.664 (Water = 1)

Vapor density : 3 (Air = 1)

Evaporation rate : 7.41 compared to Butyl acetate.

Section 10. Stability and reactivity

Stability and reactivity : The product is stable.

Incompatibility with various substances : Highly reactive with oxidizing agents.

Hazardous polymerization : Will not occur.

Section 11. Toxicological information

Chronic effects on humans : Causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Other toxic effects on humans : Hazardous in case of skin contact (irritant).

Specific effects

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Reproduction toxicity : No known significant effects or critical hazards.

Section 12. Ecological information

Products of degradation : These products are carbon oxides (CO, CO_2) and water.

Toxicity of the products of biodegradation : The product itself and its products of degradation are not toxic.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1208	Hexanes (3-methylpentane)	3	II		-
TDG Classification	UN1208	Hexanes (3-methylpentane)	3	II		**Explosive Limit and Limited Quantity Index** 1 **Passenger Carrying Ship Index** Forbidden **Passenger Carrying Road or Rail Index** 5
Mexico Classification	UN1208	Hexanes (3-methylpentane)	3	II		-

Section 15. Regulatory information

United States

HCS Classification : Flammable liquid
Target organ effects

U.S. Federal regulations : TSCA 4(a) final test rules: 3-methylpentane
TSCA 8(b) inventory: 3-methylpentane
TSCA 12(b) annual export notification: 3-methylpentane

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: 3-methylpentane
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: 3-methylpentane: Fire hazard, Immediate (Acute) Health Hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

State regulations : Pennsylvania RTK: 3-methylpentane: (generic environmental hazard)
Massachusetts RTK: 3-methylpentane

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

CEPA DSL: 3-methylpentane

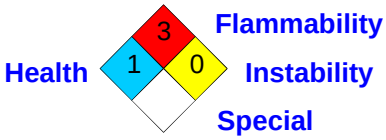
Section 16. Other information

Label Requirements : HIGHLY FLAMMABLE LIQUID AND VAPOR.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.
VAPOR MAY CAUSE FLASH FIRE.

Hazardous Material Information System (U.S.A.) :

Health	*	1
Fire hazard		3
Reactivity		0
Personal protection		C

National Fire Protection Association (U.S.A.) :



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