



Material Safety Data Sheet

<p>NFPA</p> 	<p>HMIS</p> <table border="1" style="margin: auto;"> <tr><td style="background-color: #00FFFF;">Health Hazard</td><td style="text-align: center; border: 1px solid black;">2</td></tr> <tr><td style="background-color: #FFCCCC;">Fire Hazard</td><td style="text-align: center; border: 1px solid black;">1</td></tr> <tr><td style="background-color: #FFFF00;">Reactivity</td><td style="text-align: center; border: 1px solid black;">0</td></tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	<p>Personal Protective Equipment</p>  <p>See Section 15.</p>
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1										
Common Name/ Trade Name	4-Methyl Pentanoic Acid	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Catalog Number(s).</td><td>M2256</td></tr> <tr><td>CAS#</td><td>646-07-1</td></tr> <tr><td>RTECS</td><td>Not available.</td></tr> <tr><td>TSCA</td><td>TSCA 8(b) inventory: 4-Methyl Pentanoic Acid</td></tr> <tr><td>CI#</td><td>Not available.</td></tr> </table>	Catalog Number(s).	M2256	CAS#	646-07-1	RTECS	Not available.	TSCA	TSCA 8(b) inventory: 4-Methyl Pentanoic Acid	CI#	Not available.
Catalog Number(s).	M2256											
CAS#	646-07-1											
RTECS	Not available.											
TSCA	TSCA 8(b) inventory: 4-Methyl Pentanoic Acid											
CI#	Not available.											
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<p style="text-align: center; color: blue; margin: 0;">IN CASE OF EMERGENCY</p> <p style="text-align: center; color: blue; margin: 0;">CHEMTREC (24hr) 800-424-9300</p> <p style="text-align: center; margin: 10px 0 0 0;">CALL (310) 516-8000</p>										
Commercial Name(s)	Not available.											
Synonym	Isocaproic Acid; 4-Methylvaleric Acid; Isohexanoic acid; Valeric acid, 4-methyl											
Chemical Name	Pentanoic acid, 4-methyl-											
Chemical Family	Not available.											
Chemical Formula	C6-H12-O2											
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248											

Section 2. Composition and Information on Ingredients					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) {4-}Methyl Pentanoic Acid	646-07-1				100
<p>Toxicological Data on Ingredients</p> <p>4-Methyl Pentanoic Acid: ORAL (LD50): Acute: 2050 mg/kg [Rat]. DERMAL (LD50): Acute: 966 mg/kg [Rabbit].</p>					

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (permeator). Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	<p>CARCINOGENIC EFFECTS: Not available.</p> <p>MUTAGENIC EFFECTS: Not available.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Not available.</p> <p>Repeated or prolonged exposure is not known to aggravate medical condition.</p>

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention if irritation occurs.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	Not available.
Flash Points	CLOSED CUP: 93°C (199.4°F).
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with skin. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.
Storage	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 threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat. Gloves. Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Pungent, Cheese-like
Molecular Weight	Not available.	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Not available.
Boiling Point	65°C (149°F)		
Melting Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	0.92 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	>1 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Very slightly soluble in cold water.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, ignition sources, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, acids.
Corrosivity	Not available.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact.
Toxicity to Animals	Acute oral toxicity (LD50): 2050 mg/kg [Rat]. Acute dermal toxicity (LD50): 966 mg/kg [Rabbit].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Hazardous in case of skin contact (permeator). Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Harmful if absorbed through skin. May cause skin irritation. It can be absorbed through the skin in harmful amounts. Skin absorption is the most likely route of entry Eyes: May cause eye irritation. Ingestion: . May cause gastrointestinal tract irritation. Inhalation: Inhalation of mist or vapor may cause respiratory tract irritation.


Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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Section 14. Transport Information

DOT Classification	CLASS 6.1: Poisonous material.
Identification	UNNA: 2810: Toxic Liquid, Organic, n.o.s. (4-Methylpentanoic Acid) PG: III
Special Provisions for Transport	Not available.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.
TSCA 8(b) inventory: 4-Methyl Pentanoic Acid

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 2111-464-0).
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications

WHMIS (Canada) CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

DSCL (EEC) R21- Harmful in contact with skin. S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	g

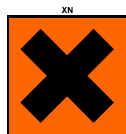
National Fire Protection Association (U.S.A.)

Health	2	0	Flammability
			Reactivity
			Specific hazard

WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Vapor respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

Section 16. Other Information

MSDS Code 6970M

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 8/14/2009.

Verified by Sonia Owen.

Printed 8/21/2009.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.