GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
	Health Hazard 2 Fire Hazard 2 Reactivity 0	 See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**3-Heptanone**
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Not available.
Synonym	Butyl Ethyl Ketone; Ethyl Butyl Ketone; Heptan-3-one; n-Butyl Ethyl Ketone
Chemical Name	3-Heptanone
Chemical Family	Not available.
Chemical Formula	C6-H14-O
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	YY133, H2204
CAS#	106-35-4
RTECS	Not available.
TSCA	TSCA 8(b) inventory: 3-Heptanone
CI#	Not available.

IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m^3)**	**STEL (mg/m^3)**	**CEIL (mg/m^3)**	**% by Weight**
1) {3-}Heptanone	106-35-4	50			100

Toxicological Data on Ingredients

3-Heptanone:
ORAL (LD50): Acute: 2760 mg/kg [Rat].
DERMAL (LD50): Acute: >16000 mg/kg [Rabbit].

Section 3. Hazards Identification

Potential Acute Health Effects

Hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to skin.
Repeated or prolonged exposure to the substance can produce target organs damage.

Continued on Next Page

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. Get medical attention.
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. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. 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	Flammable.
Auto-Ignition Temperature	390°C (734°F)
Flash Points	CLOSED CUP: 41°C (105.8°F). OPEN CUP: 46.111°C (115°F).
Flammable Limits	LOWER: 1.4% UPPER: 8.8%
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks, of heat.
Fire Fighting Media and Instructions	Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Vapors may form explosive mixtures with air.
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	Toxic flammable liquid, insoluble or very slightly soluble in water. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Continued on Next Page

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. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.
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 threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
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	TWA: 50 STEL: 75 (ppm) from ACGIH (TLV) [United States] TWA: 50 from NIOSH [United States] TWA: 230 (mg/m^3) from NIOSH [United States] TWA: 50 (ppm) from OSHA (PEL) [United States] TWA: 230 (mg/m^3) from OSHA (PEL) [United States] TWA: 50 STEL: 100 (ppm) [United Kingdom (UK)] TWA: 50 STEL: 75 (ppm) [Canada] TWA: 234 STEL: 350 (mg/m^3) [Canada] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	**Odor**	Fruity. Fatty (Strong.)
Molecular Weight	114.19 g/mole	**Taste**	Melon or banana flavor
pH (1% soln/water)	Not applicable.	**Color**	Not available.
Boiling Point	148.33°C (299°F)		
Melting Point	-39°C (-38.2°F)		
Critical Temperature	Not available.		
Specific Gravity	0.8 - 0.82 (Water = 1)		
Vapor Pressure	0.3 kPa (@ 20°C)		
Vapor Density	3.93 - 4.0 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, diethyl ether.		
Solubility	Soluble in diethyl ether. Insoluble in cold water, hot water. Miscible or soluble with alcohol or other organic solvents.		

Continued on Next Page

Section 10. Stability and Reactivity Data

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

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact.
Toxicity to Animals	Acute oral toxicity (LD50): 2760 mg/kg [Rat]. Acute dermal toxicity (LD50): >16000 mg/kg [Rabbit].
Chronic Effects on Humans	May cause damage to the following organs: skin.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Lethal Dose Conc/50% Kill: LD50 [Rabbit] - Route: Skin; Dose: >20 ml/kg Lowest Published Lethal Dose: LCL [Rat] - Route: Inhalation: 2000 ppm/4Hours
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes mild to moderate skin irritation. May cause dermatitis, rash or burning feeling. It can be absorbed through the skin. Eyes: Causes mild to moderate eye irritation. Inhalation: Inhalation of high concentrations of mist or vapor may cause respiratory tract irritation. It can affect behavior/central nervous system (central nervous system depression, ataxia, headaches, dizziness, lightheadedness, fainting, prostration) and cause suffocation. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause dermatitis, drying and cracking of the skin.

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.

Continued on Next Page

Section 13. Disposal Considerations

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

Section 14. Transport Information

DOT Classification CLASS 3: Flammable liquid.

Identification : Ketone, liquid, n.o.s. (3-Heptanone) UNNA: 1224 PG: III

Special Provisions for Transport Not available.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

Illinois toxic substances disclosure to employee act: 3-Heptanone
Rhode Island RTK hazardous substances: 3-Heptanone
Pennsylvania RTK: 3-Heptanone
Minnesota: 3-Heptanone
Massachusetts RTK: 3-Heptanone
Massachusetts spill list: 3-Heptanone
New Jersey: 3-Heptanone
California Director's List of Hazardous Substances: 3-Heptanone
TSCA 8(b) inventory: 3-Heptanone
FDA: Everything Added to Food in the United States (EAFUS) list: listed as 3-Heptanone
FEMA (Flavor and Extracts Manufacturers Association) GRAS list: listed as 3-Heptanone

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. 203-388-1).
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Not listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications

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

DSCL (EEC)

R10- Flammable.
R20- Harmful by inhalation.
R36- Irritating to eyes.
S24- Avoid contact with skin.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	2
Reactivity	0
Personal Protection	h

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

Health
Flammability
Reactivity
Specific hazard

Continued on Next Page

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. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

Section 16. Other Information

MSDS Code **3165H**

References Not available.

Other Special Considerations Uses: Synthetic flavoring ingredient; specialty solvent for lacquers; solvent mixtures for air-dired and baked finishes; for polyvinyl and nitrocellulose resins

Validated by Sonia Owen on 7/10/2007.

Verified by Sonia Owen.

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CALL (310) 516-8000

Notice to Reader

Continued on Next Page