



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Methyl Propyl Ketone

1 PRODUCT AND COMPANY IDENTIFICATION

Supplier Details: High Valley Products, Inc.
1134 West 850 North
Centerville, Utah 84014

Emergency: PERS: 800-633-8253

Phone: 801-295-9591

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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Liquids, 2
Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Specific target organ toxicity - Single exposure, 3
Health, Acute toxicity, 4 Inhalation
Health, Acute toxicity, 4 Oral

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H332 - Harmful if inhaled
H302 - Harmful if swallowed

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 - Rinse mouth.

P370 + P378 - In case of fire: Use water spray, carbon dioxide, dry chemical to extinguish.

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
107-87-9	>90%	Methyl propyl ketone
108-10-1	<10%	Methyl isobutyl ketone

4 FIRST AID MEASURES

Inhalation: If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Wash with soap and water. Get medical attention if needed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.

5 FIRE FIGHTING MEASURES

Flammable liquid and vapor. USE WATER WITH CAUTION. Material will float and may ignite on surface of water. Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.

Storage Requirements: Keep container tightly closed. Store in cool/dry area. Suitable packing materials.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:

Methyl propyl ketone cas#:(107-87-9) [>90%]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash protection: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 60 min Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Methyl isobutyl ketone cas#:(108-10-1) [<10%]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Splash contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 212 min Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Methyl propyl ketone cas#:(107-87-9) [>90%]

Components with workplace control parameters

STEL	150 ppm	USA. ACGIH Threshold Limit Values (TLV)
TWA	200 ppm 700 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	250 ppm 875 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	200 ppm 700 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
TWA	150 ppm 530 mg/m ³	USA. NIOSH Recommended Exposure Limits

Methyl isobutyl ketone cas#:(108-10-1) [<10%]

Components with workplace control parameters

TWA	50 ppm	USA. ACGIH Threshold Limit Values (TLV)
STEL	75 ppm	USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation Headache Dizziness 2010 Adoption Substances for which there is a Biological Exposure Index or Indices (see BEI section) Confirmed animal carcinogen with unknown relevance to humans		
TWA	50 ppm 205 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	75 ppm 300 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	100 ppm 410 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
The value in mg/m ³ is approximate.		

TWA 20 ppm USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation Headache Dizziness 2010 Adoption Substances for which there is a Biological Exposure Index or Indices (see BEI section) Confirmed animal carcinogen with unknown relevance to humans

TWA	50 ppm 205 mg/m ³	USA. NIOSH Recommended Exposure Limits
ST	75 ppm 300 mg/m ³	USA. NIOSH Recommended Exposure Limits

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless.
Physical State:	Liquid
Odor:	Ketone
Odor Threshold:	11 ppm
Solubility:	Moderate
Spec Grav./Density:	0.81 (20 °C)
Viscosity:	No data available
Boiling Point:	101 °C
Freezing/Melting Pt.:	-78 °C
Flash Point:	No data available
Partition Coefficient:	log Pow: 0.857
Vapor Pressure:	37 mbar (20 °C)
Vapor Density:	No data available
pH:	No data available
Evap. Rate:	No data available
Auto-Ignition Temp:	450 °C

Decomp Temp: No data available
UFL/LFL: 8.7 %(V) / 1.56 %(V)

10 STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under recommended storage conditions. May form peroxides of unknown stability.
Conditions to Avoid: Heat, flames and sparks.
Materials to Avoid: Strong Oxidizing Agents.
Hazardous Decomposition: Carbon Dioxide Carbon oxides.

11 TOXICOLOGICAL INFORMATION

Methyl propyl ketone cas#:(107-87-9) [>90%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,600 mg/kg

Inhalation LC50 Dermal LD50 LD50 Dermal - rabbit - 6,500 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Open irritation test

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System):

no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: Lowered blood pressure, Central nervous system depression, narcosis, Nausea, Dizziness, Headache, Exposure to and/or consumption of alcohol may increase toxic effects.

Synergistic effects: no data available

Additional Information:

RTECS: SA7875000

Methyl isobutyl ketone cas#:(108-10-1) [<10%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 2,080 mg/kg
Inhalation LC50 LC50 Inhalation - rat - 4 h - 8.2 - 16.4 mg/m3
Dermal LD50 LD50 Dermal - rabbit - > 16,000 mg/kg
Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Mild skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit - Moderate eye irritation - 24 h

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (4-Methylpentan-2-one)
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: Developmental Toxicity - mouse - Inhalation:

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death.

Developmental Toxicity - mouse - Inhalation:

Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Cardiovascular (circulatory) system.
no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: Blurred vision, Dermatitis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: SA9275000

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ECOLOGICAL INFORMATION

Methyl propyl ketone cas#:(107-87-9) [>90%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,240 mg/l - 96 h.

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

Methyl isobutyl ketone cas#:(108-10-1) [<10%]

Information on ecological effects

Toxicity:

Toxicity to fish LC0 - Leuciscus idus melanotus - 480 mg/l - 48 h.

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 1,550 - 3,623 mg/l - 24 h.
and other aquatic invertebrates

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 980 - 2,000 mg/l - 48 h.

Persistence and degradability: Biodegradability Biotic/Aerobic

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14 TRANSPORT INFORMATION

UN1224, Ketones, liquid, n.o.s., 3, PGII, (methyl propyl ketone, methyl isobutyl ketone)

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Methyl propyl ketone (107-87-9) [>90%] MASS, OSHAWAC, PA, TSCA, TXAIR

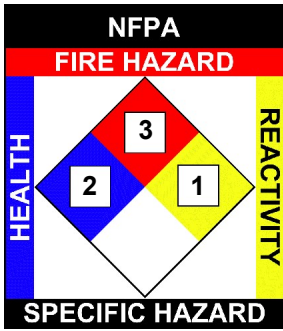
Methyl isobutyl ketone (108-10-1) [<10%] CERCLA, HAP, MASS, NJHS, OSHAWAC, PA, SARA313, TOXICRCRA, TSCA, TXAIR, TXHWL

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level
CERCLA = Superfund clean up substance
HAP = Hazardous Air Pollutants
NJHS = NJ Right-to-Know Hazardous Substances
SARA313 = SARA 313 Title III Toxic Chemicals
TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)
TXHWL = TX Hazardous Waste List

NFPA: Health = 2, Fire = 3, Reactivity = 1, Specific Hazard = n/a

HMIS III: Health = 2, Fire = 3, Physical Hazard = 1



HMIS	
HEALTH	<input type="checkbox"/> 2
FLAMMABILITY	<input type="checkbox"/> 3
PHYSICAL HAZARD	<input type="checkbox"/> 1
PERSONAL PROTECTION	<input type="checkbox"/>

Disclaimer:

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