

SECTION 1 Identification

1.1. Product identifier

Product form	: Substance
Trade name	: Methyl Isobutyl Ketone
Chemical name	: Methyl Isobutyl Ketone
IUPAC name	: 4-methylpentan-2-one
CAS-No.	: 108-10-1
Product code	: HP-040835-FP
Formula	: C ₆ H ₁₂ O
BIG No	: 52122

1.2. Other means of identification

Synonyms	: Hexone / Isobutyl methyl ketone / Isopropylacetone / Methyl isobutyl ketone / 4-Methyl-2-pentanone / 2-Methyl-4-pentanone / 4-Methylpentan-2-one / MIBK / Pentan-2-one, 4-methyl-
EC Index No. (Report)	: 606-004-00-4
EC-No.	: 203-550-1

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	: Solvent, Chemical raw material, Chemical intermediate, Odorant
Recommended use	: Chemical raw material

1.4. Supplier's details

Manufacturer

Monument Chemical
16717 Jacintoport Blvd.
Houston, TX, 77015
USA
T 832-376-2000
sds@monumentchemical.com - www.monumentchemical.com

1.5. Emergency phone number

Emergency number	: 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24 HR Emergency Assistance: 1-832-376-2026
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SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (inhalation), Category 4	H332	Harmful if inhaled.
Acute toxicity (inhalation:vapor), Category 4	H332	Harmful if inhaled.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Full text of H statements : see section 16		

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2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer.

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, protective clothing, protective gloves.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a doctor, a POISON CENTER if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder, Water spray to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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SECTION 3 Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Methyl Isobutyl Ketone (Main constituent)	CAS-No.: 108-10-1	≥ 99.5

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If eye irritation persists: Consult an eye specialist. Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if inhaled.
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause respiratory irritation.
Symptoms/effects after skin contact	: ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.
Symptoms/effects after eye contact	: Eye irritation. Causes serious eye irritation.
Symptoms/effects after ingestion	: Gastrointestinal complaints. AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Symptoms similar to those listed under inhalation.
Chronic symptoms	: Feeling of weakness. Red skin. Skin rash/inflammation. Dry/sore throat. Gastrointestinal complaints. Loss of appetite. Headache. Dizziness. Lung tissue affection/degeneration.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137).
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.
Environmental precautions : Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, spray, vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling.
- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

7.2. Conditions for safe storage, including incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical/ventilating/lighting equipment.
- Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place.
- Storage area : Meet the legal requirements. Aboveground. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. reducing agents. (strong) acids. (strong) bases. halogens.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: steel. stainless steel. carbon steel. aluminium. iron. glass. MATERIAL TO AVOID: copper. synthetic material.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Methyl Isobutyl Ketone (108-10-1)	
USA - ACGIH® - Threshold Limit Values	
Local name	Methyl isobutyl ketone
ACGIH® TLV® TWA	82 mg/m ³
	20 ppm
ACGIH® TLV® STEL	307 mg/m ³
	75 ppm
Remark (ACGIH®)	TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2025
USA - ACGIH® - Biological Exposure Indices	
Local name	Methyl isobutyl ketone

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Methyl Isobutyl Ketone (108-10-1)	
BEI (BLV)	1 mg/l Parameter: Methyl isobutyl ketone - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Hexone (Methyl isobutyl ketone)
OSHA PEL TWA	410 mg/m ³
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	500 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	205 mg/m ³
	50 ppm
NIOSH REL (STEL)	300 mg/m ³
	75 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:

Excellent resistance: Polyethylene/ethylenevinylalcohol. Good resistance: butyl rubber. Polyvinylalcohol (PVA). Tetrafluoroethylene. Less resistance: Polyvinylchloride (PVC). Nitrile rubber. neoprene (chloroprene rubber). Poor resistance: Chlorinated polyethylene. Natural rubber. Viton. Nitrile rubber/PVC

Hand protection:

Wear protective gloves.

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

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SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless liquid.
Color	: Colorless
Odor	: sharp Sweet
Odor threshold	: 7.8 ppm (May) 32 mg/m ³ (May)
pH	: 5.4 (14.1 g/l, 20 °C)
Melting point	: -84 °C ; -119.2 °F
Freezing point	: No data available
Boiling point	: 116.5 °C ; 241.7 °F
Critical temperature	: 298 °C
Critical pressure	: 32730 hPa
Flash point	: 18 °C ; 64.4 °F closed cup
Relative evaporation rate (butyl acetate=1)	: 1.6
Relative evaporation rate (ether=1)	: 5.6
Flammability (solid, gas)	: Highly flammable liquid and vapor.
Vapor pressure	: 20 hPa (at 20 °C)
Vapor pressure at 50°C	: 93 hPa (Antoine equation)
Relative vapor density at 20°C	: 3.5
Relative density	: 0.801 Type: 'relative density' Temp.: 20 °C
Relative density of saturated gas/air mixture	: 1.02
Density	: 0.7978 g/cm ³ Type: 'density' Temp.: 20 °C
Molecular mass	: 116.5 g/mol
Solubility	: Moderately soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in oils/fats. Water: 20 g/l (at 20 °C) Ethanol: complete Ether: complete Acetone: complete
Partition coefficient n-octanol/water (Log Pow)	: 1.31
Auto-ignition temperature	: 448 °C ; 838 °F
Decomposition temperature	: No data available in the literature
Viscosity, kinematic	: No data available in the literature
Viscosity, dynamic	: 0.545 mPa·s (25 °C)
Explosion limits	: 1.2 – 8 vol % 42 – 330 g/m ³ Lower explosion limit: 1 vol % Upper explosion limit: 8 vol %
Particle characteristics	: Particle size : Not applicable (liquid)

9.2. Data relevant with regard to physical hazard classes (supplemental)

Specific conductivity	: 5.2 µS/m
Saturation concentration	: 77 g/m ³
VOC content	: 100 %
Surface tension	: No data available in the literature
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Volatile. May generate electrostatic charges.

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

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10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled. Inhalation:vapor: Harmful if inhaled. Inhalation:dust,mist: Harmful if inhaled.

Methyl Isobutyl Ketone (108-10-1)

LD50 oral rat	2080 mg/kg
LD50 dermal rat	≥ 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	3000 mg/kg
LC50 Inhalation - Rat	11.6 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (vapours))
ATE US (oral)	2080 mg/kg body weight
ATE US (dermal)	3000 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11.6 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 5.4 (14.1 g/l, 20 °C)
Serious eye damage/irritation : Causes serious eye irritation.
pH: 5.4 (14.1 g/l, 20 °C)
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Methyl Isobutyl Ketone (108-10-1)

IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity
In OSHA Hazard Communication Carcinogen list	Yes

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Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified

Methyl Isobutyl Ketone (108-10-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapor, 90 days)	4106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified

Methyl Isobutyl Ketone (108-10-1)	
Viscosity, kinematic	No data available in the literature

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if inhaled.

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. May cause respiratory irritation.

Symptoms/effects after skin contact : ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

Symptoms/effects after eye contact : Eye irritation. Causes serious eye irritation.

Symptoms/effects after ingestion : Gastrointestinal complaints. AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Symptoms similar to those listed under inhalation.

Chronic symptoms : Feeling of weakness. Red skin. Skin rash/inflammation. Dry/sore throat. Gastrointestinal complaints. Loss of appetite. Headache. Dizziness. Lung tissue affection/degeneration.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ecology - air : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Slightly harmful to crustacea (Daphnia). Slightly harmful to fishes. Groundwater pollutant. Fouling to shoreline. Slightly harmful to algae. Slightly harmful to bacteria.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Methyl Isobutyl Ketone (108-10-1)	
LC50 - Fish [1]	> 179 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 200 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

Methyl Isobutyl Ketone (108-10-1)	
Persistence and degradability	Not established.
Biochemical oxygen demand (BOD)	2.06 g O ₂ /g substance

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Methyl Isobutyl Ketone (108-10-1)	
Chemical oxygen demand (COD)	2.16 g O ₂ /g substance
ThOD	2.72 g O ₂ /g substance

12.3. Bioaccumulative potential

Methyl Isobutyl Ketone (108-10-1)	
Partition coefficient n-octanol/water (Log Pow)	1.31
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Methyl Isobutyl Ketone (108-10-1)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.008 (log Koc, Weight of evidence, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No
Other information	: Avoid release to the environment.

SECTION 13 Disposal considerations

Regional waste regulation	: U.S. - RCRA (Resource Conservation Recovery Act) - U Series Wastes - Acutely Toxic Wastes Other Hazardous Characteristics. U.S. - RCRA (Resource Conservation Recovery Act) - Basis for Listing - Appendix VII. U.S. - RCRA (Resource Conservation Recovery Act) - TSD Facilities Ground Water Monitoring. U.S. - RCRA (Resource Conservation Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards. U.S. - RCRA (Resource Conservation Recovery Act) - List for Hazardous Constituents. U.S. - RCRA (Resource Conservation Recovery Act) - Constituents for Detection Monitoring.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Flammable vapors may accumulate in the container. Handle empty containers with care because residual vapors are flammable.
Ecological waste information	: Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

UN-No. (DOT)	: UN1245
UN-No. (IMDG)	: 1245
UN-No. (IATA)	: 1245

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14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Methyl isobutyl ketone
Proper Shipping Name (IMDG)	: METHYL ISOBUTYL KETONE
Proper Shipping Name (IATA)	: Methyl isobutyl ketone
Transport document description (DOT)	: UN1245 Methyl isobutyl ketone, 3, II
Transport document description (IMDG)	: UN 1245 METHYL ISOBUTYL KETONE, 3, II (14°C c.c.)
Transport document description (IATA)	: UN 1245 Methyl isobutyl ketone, 3, II

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 3
Hazard labels (DOT)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
Hazard labels (IMDG)	: 3



IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3



14.4. Packing group

Packing group (DOT)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)	: UN1245
DOT Special Provisions (49 CFR 172.102)	: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

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DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

IMDG

Transport regulations (IMDG)	: Subject to the provisions
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: B
Flash point (IMDG)	: 14°C c.c.

IATA

Transport regulations (IATA)	: Subject to the provisions
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
ERG code (IATA)	: 3L

SECTION 15 Regulatory information

15.1. Federal regulations

Methyl Isobutyl Ketone (108-10-1)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

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Methyl Isobutyl Ketone

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

15.2. International regulations

CANADA

Methyl Isobutyl Ketone (108-10-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Methyl Isobutyl Ketone (108-10-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Methyl Isobutyl Ketone (108-10-1)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

15.3. State regulations

Methyl Isobutyl Ketone (108-10-1)

U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs) U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List



WARNING:

This product can expose you to chemicals including Methyl Isobutyl Ketone, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 1/21/2026
Issue date : 1/21/2026
Other information : None.

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Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer.

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organization for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)

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Abbreviations and acronyms	
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstracts Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

NFPA health hazard

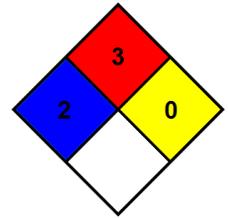
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:		
Section	Changed item	Comments
	Revision date	Modified
	Supersedes	Modified
	Flammability	Modified
	ATE US (gases)	Added
	NFPA reactivity	Added
	NFPA health hazard	Added
	NFPA fire hazard	Added
1	Use of the substance/mixture	Added
2.1	GHS-US classification	Modified
4	Symptoms/effects	Added
4	Symptoms/effects after eye contact	Modified
4	First-aid measures after inhalation	Modified
4	First-aid measures after ingestion	Modified
4	First-aid measures after eye contact	Modified
4	Symptoms/effects after skin contact	Added
4	Symptoms/effects after ingestion	Added
4	First-aid measures general	Added
4	Chronic symptoms	Added
5.2	Fire hazard	Modified
5.3	Protection during firefighting	Modified
6	Reference to other sections (8, 13)	Modified
6	Methods for cleaning up	Modified

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6	Protective equipment	Modified
6	Emergency procedures	Modified
6	Protective equipment	Added
6	For containment	Added
7.1	Hygiene measures	Modified
7.1	Precautions for safe handling	Modified
7.2	Storage conditions	Modified
7.2	Storage area	Added
7.2	Special rules on packaging	Added
7.2	Packaging materials	Added
7.2	Information on mixed storage	Added
7.2	Heat-ignition	Added
8	Regulatory reference	Modified
8.1	Regulatory reference	Modified
8.2	Respiratory protection	Modified
8.2	Eye protection	Modified
8.2	Materials for protective clothing	Added
9	Viscosity, dynamic	Added
9	Lower explosion limit	Added
9	Upper explosion limit	Added
9	VOC content	Added
9	Viscosity, kinematic	Added
9	Vapor pressure at 50°C	Added
9	Specific conductivity	Added
9	Solubility in ether	Added
9	Solubility in ethanol	Added
9	Solubility in acetone	Added
9	Solubility	Added
9	Saturation concentration	Added
9	Relative evaporation rate (butyl acetate=1)	Added
9	Relative density of saturated gas/air mixture	Added
9	pH	Added
9	Particle size	Added
9	Other properties	Added
9	Explosion limits (g/m ³)	Added
9	Decomposition temperature	Added
9	Critical temperature	Added

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9	Critical pressure	Added
9	Density	Modified
9	Relative density	Modified
10	Reactivity	Modified
10	Conditions to avoid	Modified
11	LC50 Inhalation - Rat	Modified
11	LD50 dermal rat	Added
11	NOAEL (oral,rat,90 days)	Added
11	NOAEC (inhalation,rat,vapor,90 days)	Added
11	LOAEL (oral,rat,90 days)	Added
12.1	Ecology - water	Added
12.1	Ecology - air	Added
12.1	LC50 - Fish [1]	Modified
12.1	EC50 - Crustacea [1]	Modified
12.2	ThOD	Added
12.2	Chemical oxygen demand (COD)	Added
12.2	Biochemical oxygen demand (BOD)	Added
12.4	Surface tension	Added
12.4	Organic Carbon Normalized Adsorption Coefficient (Log Koc)	Added
12.4	Ecology - soil	Added
13	Additional information	Modified
14	Transport regulations (IMDG)	Added
14	Transport regulations (IATA)	Added
15	VOC content	Added
15	Regulatory reference	Modified
16	Abbreviations and acronyms	Added

Safety Data Sheet (SDS), USA

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