



MATERIAL SAFETY DATA SHEET

2522 Plantation Center Drive
Matthews, NC 28105
(704) 845 9440

www.ciscochem.com

PRODUCT NAME: Diisobutyl Ketone

CHEMICAL NAME: Diisobutyl Ketone

SYNONYMS: DIBK

CAS NUMBER: 108-83-8

PROPERTIES: ODOR APPEARANCE: clear, colorless liquid with mild, sweetish minty odour
ODOR THRESHOLD: 0.1 – 0.3 ppm
VAPOUR PRESSURE: approx. 1.7mmHg/23kPa (20 c)
EVAPORATION RATE (Butyl acetate=1): 0.2
VAPOUR DENSITY (air=1): 4.9
BOILING RANGE: 165 c/329 F
FREEZING POINT: -46 c/-51F
SPECIFIC GRAVITY: 0.806 (20/20 c)
WATER SOLUBILITY: 500mg per litre (20 c)
IN OTHER SOLVENTS: soluble in most organic solvents
VISCOSITY: 1.02CENTIPOISE (25 c)
PH: none- (does not liberate hydrogen ions when dissolved)

HAZARDS: 4-heptanone, 2,6-dimethyl - 100%
EFFECTS OF CHRONIC EXPOSURE
GENERAL: prolonged exposure may cause skin cracking and dermatitis
SENSITISING: not known to be a sensitizer
CARCINOGENIC: not considered a tumorigen or a carcinogen in humans or animals
REPRODUCTIVE EFFECT: not known effect in humans or animals
SYNERGISTIC WITH: not known
LD50: 5750mg/kg (oral, rat), 1415mg/kg (oral, mouse); 16,000mg/kg (skin, rabbit)
LC50: OVER 2000PPM (Inhalation, rat)

FIRE FIGHTING FLASH POINT: 60 c/140 F (closed cup)
MEASURES: AUTOIGNITION TEMPERATURE: 396 c/745 F
FLAMMABLE LIMITS: 0.8%-7.1%
COMBUSTION PRODUCTS: carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
FIRE FIGHTING PRECAUTIONS: foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water- water jet spreads flames; fire fighters must wear SCBA
STATIC DISCHARGE: will not accumulate a static charge
MECHANICAL IMPACT: not sensitive
CHEMICAL STABILITY: stable; will not polymerize
REACTIVE WITH: strong oxidizing agents
DECOMPOSITION PRODUCTS: None apart from Hazardous combustion products

PERSONAL PROTECTION HANDS: polyvinyl alcohol or "4H" gloves recommended – consult supplier to confirm suitability and for other options
MEASURES: EYES: safety glasses with side shields – always protect the eyes
VENTILATION: not required unless product mist or vapour is created by handling
CLOTHING: no special protective clothing required.



Carolina International Sales Co., Inc

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EMERGENCY & FIRST AID PROCEDURES: SKIN: Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered
EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.
INHALATION: Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomiting material. Seek medical help promptly.
NOTE: Inadvertent inhalation of vomiting material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

EXPOSURE LIMITS: IDLH: 500ppm
OSHA standards: Permissible exposure limit: Table Z-1 8hr TWA:50ppm
OSHA PEL TWA: 25ppm
NIOSH TWA: 10hr 25ppm
Threshold Limit Values: 8 hour weighted avg (TWA): 25ppm. Excursion Limit Recommendation:Excursions in worker exposure levels may exceed three times TLV-TWA for no more than thirty minutes during a work day, and under no circumstances should they exceed five times the TLV-TWA, provided that the TLV-TWA is not exceeded.

TOXICOLOGICAL INFORMATION: EFFECTS OF ACUTE EXPOSURE
SKIN CONTACT: slight irritation
SKIN ABSORPTION: very slight; no toxic effects likely by this route
EYE CONTACT: slightly irritating, will not damage eyes; vapour may irritate above 25ppm
INHALATION: 25-50ppm vapour may irritate; may cause headache, dizziness, drowsiness, nausea; low vapour pressure makes this an unlikely route of exposure
INGESTION: may cause mouth & throat irritation & stomach discomfort; may cause headache, dizziness, incoordination, drowsiness, nausea

EFFECTS OF CHRONIC EXPOSURE
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REPRODUCTIVE EFFECT: not known effect in humans or animals
SYNERGISTIC WITH: not known
LD50: 5750mg/kg (oral, rat), 1415mg/kg (oral, mouse); 16,000mg/kg (skin, rabbit)
LC50: OVER 2000PPM (Inhalation, rat)

ECOLOGICAL INFORMATION: This product can not accumulate in living tissue, this product is readily and rapidly biodegradable in the presence of oxygen; biodegradation of 39% & 88% in 10 & 20 days; half life in air is estimated at 22 hours

DISPOSAL CONSIDERATIONS: NE

CARCINOGENIC PROPERTIES & NOTIFICATIONS: NE



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TRANSPORT INFORMATION: Product Identification Number - UN-1157
Shipping Name: Diisobutyl Ketone
Classification: Class 3; Packing Group III
Label: Flammable liquid, Class 3
HMIS: Health-0/1, FIRE-2, Reactivity-0
Material Use: Solvent, Organic Synthesis

HANDLING & STORAGE: Store and use in a cool dry environment, away from sources of ignition, heat and oxidizing agents. Use with adequate ventilation. Do not cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.

ACCIDENTAL RELEASE MEASURES: LEAK PRECAUTION: dyke to control spillage and prevent environmental contamination
FIRE POTENTIAL: blanket spill with foam as a precaution against accidental ignition. Avoid sparks
HANDLING SPILL: ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep, shovel & store in closed containers for recycling or disposal
WASTE DISPOSAL: do not flush to sewer; may be incinerated in approved facility
ENVIROINFO: this product can not accumulate in living tissue, this product is readily and rapidly biodegradable in the presence of oxygen; biodegradation of 39% & 88% in 10 & 20 days; half life in air is estimated at 22 hours