

MATERIAL SAFETY DATA SHEET

According to EC directive 93/112/EC.

1. PRODUCT AND COMPANY IDENTIFICATION.

Trade Name: **MEK**

Synonyms: Methyl Ethyl Ketone
Ethyl Methyl Ketone
Butanone
Butan-2-One

Manufacturer/Supplier: Central Chemical Supplies Limited
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2. COMPOSITION/INFORMATION ON INGREDIENTS.

Contains

Chemical	% Conc	Classification	Exposure	CAS	EINECS
Butanone	100	F, Xi; R11-36-66-67	200 ppm	78-93-3	201-159-0

3. HAZARD IDENTIFICATION.

Highly flammable liquid evolving explosive vapours. Liquid and vapours are irritating to skin, eyes and respiratory system. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

4. FIRST AID MEASURES.

Exposure route	Symptom	Treatment
Inhalation	Irritation of respiratory tract.	Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete seek medical attention.
Skin contact	Irritation, defatting.	Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin is damaged or if irritation persists seek medical attention.
Eye contact	Severe irritation, reddening, watering.	Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention.
Ingestion	Sore throat, nausea, diarrhoea and abdominal pain.	Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell seek medical attention.
Immediate treatment/antidote:		Symptomatic treatment.

5. FIRE FIGHTING MEASURES

Suitable extinguishers:	Carbon dioxide, dry chemical, alcohol resistant foam, sand, earth or water fog. Keep containers cool with water spray.
Hazardous combustion products:	Oxides of carbon.
Special equipment for fire fighting:	Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Safety precautions:	Wear appropriate PPE – See section 8. Remove sources of ignition.
Environmental precautions:	Do not allow material to enter drains or watercourses.
Clean up procedure:	Bund or absorb material with sand, earth or other suitable absorbent. Transfer liquid to a salvage tank, subsequently absorb residues with absorbent, sweep up and hold for waste disposal.

7. HANDLING AND STORAGE

Handling

Ventilation:	Good general ventilation. LEV may be required.
Recommended procedures and equipment:	Avoid contact with skin and eyes. Do not breathe vapour. Use non-sparking tools.

Storage

Temperature range:	Ambient.
Keep away from:	See section 10.
Suitable storage media:	Tightly closed, clearly labelled original containers.
Precautions against static discharge:	Use earthing straps.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:	200 ppm (600 mg/m ³), 8h TWA; 300 ppm (900 mg/m ³), STEL Type: OES
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Protective measures

Respiratory:	Type approved RPE for organic vapours if required.
Hand:	Impervious gloves.
Eye:	Safety goggles.
Skin:	Overalls and boots.
Hygiene measures:	Always wash thoroughly after handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid.
Odour:	Characteristic odour.
Boiling point/range:	79.6°C
Melting point/range:	-86°C
Flash point:	-7°C
Autoignition temperatures:	515°C
Explosive limits:	1.8-11.5%
Vapour pressure:	95.6 mbar @ 20°C
Relative density:	0.8061
Solubility in water:	26.3% @ 20°C

10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions to avoid:	Sources of ignition.
Materials to avoid:	Oxidising agents.
Hazardous decomposition products:	Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Effects:	Vapour is irritating to eyes and respiratory tract, may cause systemic effects: narcosis, headache. Liquid is severely irritating to eyes and irritating to skin, may cause defatting resulting in dermatitis. Ingestion of liquid may cause sore throat, nausea, diarrhoea and abdominal pain. Simultaneous over-exposure to MEK and n-Hexane may result in irreversible effects.
	LD ₅₀ 2737 mg/kg Oral-rat (RTECS)

12. ECOLOGICAL INFORMATION

Environmental effects

Mobility:	Soluble in water.
Degradability:	BOD ₅ = ThOD
Bioaccumulative potential:	Practically not bioaccumulable Log Pow = 0.29
Aquatic toxicity:	Low toxicity to fish and other aquatic species. LC ₅₀ , 96h, Fish – 3200 – 5600 mg/l EC ₅₀ , 24h, daphnia = 7060 mg/l


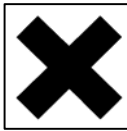
13. DISPOSAL

Substance:	Via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Container:	As substance. Used containers must not be cut up or punctured until completely purged of product residues.

14. TRANSPORT INFORMATION

UN no:	1193	Class/item no:	3, 3 ^o (b)
Primary hazard:	Flammable liquid		
Packing group	II	Emergency action code:	2 [Y] E
H.I. no:	33		

15. REGULATORY INFORMATION

Supply label details:	Ref. CHIP 99 (2)
Hazard symbol(s):	 
Risk phrase(s):	F – Highly flammable. Xi - Irritant
Risk phrase(s):	R11 – Highly flammable. R36 – Irritating to eyes. R66 – Repeated exposure may cause skin dryness or cracking. R67 – Vapours may cause drowsiness and dizziness.
Safety phrase(s):	S9 – Keep container in a well ventilated place. S16 – Keep away from sources of ignition – No smoking.
E.C. no:	201-159-0

16. OTHER INFORMATION

Disclaimer

The information contained in this document is intended to describe the product only in terms of health, safety and environmental requirements for the purposes of its safe handling, use and disposal and is to the best of Central Chemical Supplies Limited knowledge and belief correct. Central Chemical Supplies Limited Technical Services will be pleased to give further advice and assistance, but customers must satisfy themselves (by appropriate testing if necessary) that the product is suitable for their purposes and conditions of use and that their facilities and arrangements are suitable for handling or using the product. Accordingly Central Chemical Supplies Limited disclaims any liability for loss, injury or damage which may result from the use of the product, this information or from such advice and assistance save as may be expressly agreed under its terms of sale. This information does not comprise a technical or performance specification for the product and customers are referred to any relevant product technical information or specification issued by Central Chemical Supplies Limited.

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