
MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Methyl Ethyl Ketone
CAS number: 78-93-3
EINECS number: 201-159-0
Product code: NSI-002448, NSI-002770, NSI-008775
Synonyms: 2-BUTANONE
MEK
Brand: Solmedia

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Solmedia Ltd.
Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
Telephone: 0844 80 80 900
Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone: +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP: Regulation (EC) No. 1272/2008 [CLP]

Hazard Class	Hazard Category	Hazard Statement
Flammable liquid	Category 2	H225
Eye irritation	Category 2	H319
Single target organ toxicity – Single exposure (STOT SE)	Category 3	H336, EUH066

Most important adverse effects:

Highly flammable liquid and vapour. Causes serious eye irritation.
May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

2.2 Label elements

Hazard statements: H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
EUH066: Repeated exposure may cause skin dryness or cracking.

Signal words: Danger

Hazard pictograms: GHS02: Flammable
GHS07: Irritant



Precautionary statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+378: In case of fire: Use dry powder or dry sand for extinction.
P403+233: Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical identity: Methyl Ethyl Ketone 99.7% Acs
CAS number: 78-93-3
EINECS number: 201-159-0
Contains: Molecular Formula: C₄H₈O
Molecular Weight: 72.11 g/mol

3.2 Mixtures

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

		Classification (Regulation (EC) No 1272/2008 [CLP])	
Hazardous Components		Hazard class/ Hazard category	Hazard Statements
Name:	Ethyl methyl ketone	FLAM. LIQUID CAT. 2, EYE IRRT. CAT. 2, STOT SE CAT. 3.	H225
CAS NO.	78-93-3		H319
EC-NO.	201-159-0		H336
INDEX NO.	606-002-00-3		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact in case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: No data available.

Eye contact: There may be irritation and redness.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects:
No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Flash back possible over considerable distance., Container explosion may occur under fire conditions.

5.3 Advice for firefighters

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate the area immediately.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions

Do not discharge into drains or rivers.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Refer to section 13 of SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store under inert gas. Moisture sensitive. Store in cool, well ventilated area. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Hygroscopic. Store under nitrogen.

7.3 Specific end use(s)

No special requirement.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits:

State	8-Hour TWA	15 min. STEL
EU	600 mg/m ³	900 mg/m ³

Respirable dust

DNEL / PNEC

No data available.

8.2 Exposure controls

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

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Splash contact
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 292 min

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

Skin protection: Impervious clothing. 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.

Environmental: Do not let product enter drains. Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State: Liquid

Colour:	Colourless
Boiling point/range°C:	80
Melting point/range°C:	-87
Flammability limits %:	
	lower: 1.8
	upper: 10.1
Flash point°C:	-3
Part.coeff. n-octanol/water:	
	log Pow: 0.29
Vapour pressure:	95 hPa at 20 °C
Relative density:	0.805 g/mL at 25 °C

9.2 Other safety information

Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Moist air. Heat. Flames. Sources of ignition.

10.5 Incompatible materials

Oxidising agents. Strong reducing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. -
Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	2,737	mg/kg
INHALATION	MUS	4H LC50	32,000	mg/m ³
DERMAL	RBT	LD50	6,480	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	-	Based on test data

Symptoms / routes of exposure

Skin contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects:
No data available.

Other information: Not applicable.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H ErC50	400	mg/l
DAPHNIA	48H EC50	> 520	Mg/l

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1 UN number

UN1193

14.2 UN proper shipping name

ADR/RID: ETHYL METHYL KETONE
IMDG: ETHYL METHYL KETONE
IATA: Ethyl methyl ketone

14.3 Transport hazard class(es)

3

14.4 Packaging group

2

14.5 Environmental hazards

No

Marine pollutant: No

14.6 Special precautions for user

Tunnel restriction code: (D/E)

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and 3:

EUH066: Repeated exposure may cause skin dryness or cracking.

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.