



Safety Data Sheet

Methyl Ethyl Ketone

Version 1.00

Revision Date 27.05.2019

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

Product identifier

Trade name

Methyl Ethyl Ketone

Synonyms

2-butanone, methyl acetone

Product code

2120

CAS-No.

78-93-3

EINECS-No.

201-159-0

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

Use

Solvent. Raw material for printing inks and printing ink additives. Paint related material. Industrial use.

Manufacturer or supplier's details

Company

Sasol Chemicals, a division of Sasol South Africa Ltd

Address

Sasol Place, 50 Katherine Street
Sandton
2090
South Africa

Telephone

+27103445000

E-mail address

sasolchem.info.sa@sasol.com

Supplier's details

Sasol Chemicals Pacific Ltd

2 Shenton way #06-01

SGX Centre 1



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	068804
	Singapore
Telephone	+65 6533 8856
E-mail address	info.sg@sasol.com
Emergency Phone Number	
Emergency telephone number	+44 (0)1235 239 670 (Europe, Israel, Africa, Americas)
	+44(0)1235 239 671 (Middle East, Arabic African countries)
	+65 3158 1074 (Asia Pacific)
	+86 10 5100 3039 (China)
	+27 (0)17 610 4444 (South Africa)
	0800 112 890 RSA-Local only
	+61 (2) 8014 4558 (Australia)

SECTION 2. Hazards identification

Classification of the substance or mixture

GHS Classification

Classification	SS 586 : Part 2: Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods, Part 2 : Globally harmonized system of classification and labelling of chemicals - Singapore's adaptations
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Flammable liquids

Category 2

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		Eye damage/irritation	Category 2
		Specific target organ toxicity - single exposure	Category 3
GHS label elements			
Hazard pictograms	:	 	
Signal word	:	Danger	
Hazard statements	:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.	
Precautionary statements	:	Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves/ eye protection/ face protection. Response: P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.	



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Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.



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SECTION 3. Composition/information on ingredients

Substance

Butanone; Methyl Ethyl Ketone

Contents: ≥ 99.70 %W/W

CAS-No. 78-93-3

Index-No. 606-002-00-3

EC-No. 201-159-0

Hazard statements *H225 H319 H336*

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. First aid measures

Description of necessary first-aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious



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person.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

SECTION 5. Firefighting measures

Suitable extinguishing media	Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO ₂)
Unsuitable extinguishing media	No information available.
Special hazards arising from the substance or mixture	Vapours may form explosive mixtures with air. Flash back possible over considerable distance.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6. Accidental release measures

Personal precautions	Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist. Material can create slippery conditions.
Environmental precautions	Should not be released into the environment. Prevent further



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leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material and dispose of as hazardous waste.

Reference to other sections Refer to Section 8 and 13

SECTION 7. Handling and storage

Safe handling advice Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Ensure all equipment is electrically grounded before beginning transfer operations. Take precautionary measures against static discharges.

Advice on protection against fire and explosion Keep away from heat and sources of ignition. Use explosion-proof equipment.

Requirements for storage areas and containers Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage No data available

SECTION 8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
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METHYL ETHYL KETONE (MEK, 2-BUTANONE)	TWA	590 mg/m ³	2006	Singapore PELs
METHYL ETHYL KETONE (MEK, 2-BUTANONE)	TWA	200 ppm	2006	Singapore PELs
METHYL ETHYL KETONE (MEK, 2-BUTANONE)	STEL	885 mg/m ³	2006	Singapore PELs
METHYL ETHYL KETONE (MEK, 2-BUTANONE)	STEL	300 ppm	2006	Singapore PELs

Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Gloves suitable for permanent contact:

Material: butyl-rubber

Break through time: 4 h

Material thickness: 0.5 mm

Eye protection

Safety glasses with side-shields

Skin and body protection

Protective suit Safety shoes

Hygiene measures

Wash hands before breaks and immediately after handling the product.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

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Form	Liquid
State of matter	Liquid; at 20 ° C; 1,013 hPa
Colour	Colourless
Odour	characteristic
Odour Threshold	No data available
pH	No data available
Melting point/range	-86.3 ° C
Boiling point/boiling range	79.6 ° C
Flash point	-6 ° C; closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Auto-ignition temperature	404 ° C
Lower explosion limit	1.4 %(V)
Upper explosion limit	11.4 %(V)
Vapour pressure	121.323 hPa; 25 ° C
Relative vapour density	1.15(Air = 1.0)
Density	0.805 g/cm ³
Water solubility	Partly miscible
Viscosity, dynamic	0.41 mPa.s
Viscosity, kinematic	0.51 mm ² /s

SECTION 10. Stability and reactivity



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Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Strong oxidizing agents Incompatible with acids. Halogenated compounds
Hazardous decomposition products	Carbon oxides.

SECTION 11. Toxicological information

Acute oral toxicity	Butanone; Methyl Ethyl Ketone: LD50 Rat: 2,000 mg/kg; (literature value)
Acute dermal toxicity	Butanone; Methyl Ethyl Ketone: LD50 Rabbit: > 2,000 mg/kg; (literature value)
Skin irritation	Butanone; Methyl Ethyl Ketone: No data available
Eye irritation	Butanone; Methyl Ethyl Ketone: Rabbit: Highly irritating (literature value)
Sensitisation	Butanone; Methyl Ethyl Ketone: Guinea pig: Not sensitizing; Maximisation Test; (literature value)
Mutagenicity	Butanone; Methyl Ethyl Ketone:



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Ames test: Salmonella typhimurium; with and without; Not mutagenic; (literature value)

SECTION 12. Ecological information

Toxicity to fish	Butanone; Methyl Ethyl Ketone: Leuciscus idus; 48 h; LC50; > 100 mg/l; (literature value);
Toxicity to daphnia and other aquatic invertebrates	Butanone; Methyl Ethyl Ketone: static test; Daphnia magna; 48 h; EC50; > 100 mg/l
Toxicity to algae	Butanone; Methyl Ethyl Ketone: static test; Desmodesmus subspicatus (green algae)7 d; EC50; > 100 mg/l; (literature value);
Biodegradability	Butanone; Methyl Ethyl Ketone: aerobic; 98 %; 28 d; Readily biodegradable.; (literature value);
Mobility in soil	Butanone; Methyl Ethyl Ketone: No data available
Results of PBT and vPvB assessment	Butanone; Methyl Ethyl Ketone: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
Other adverse effects	Butanone; Methyl Ethyl Ketone:

SECTION 13. Disposal considerations



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Product

In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.

SECTION 14. Transport information

ADR

UN number: 1193
Class: 3
Packaging group: II; F1;
Proper shipping name: METHYL ETHYL KETONE

RID

UN number: 1193
Class: 3
Packaging group: II; F1
Proper shipping name: METHYL ETHYL KETONE

ADNR

UN number: 1193
Class: 3
Packaging group: II; F1



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Proper shipping name: METHYL ETHYL KETONE

IMDG

UN number: 1193

Class: 3

EmS: F-E, S-D

Packaging group: II

Proper shipping name: METHYL ETHYL KETONE

Marine pollutant Not a Marine Pollutant

ICAO/IATA

UN number : 1193

Class: 3

Packaging group: II

Proper shipping name: METHYL ETHYL KETONE

Transport in bulk according Methyl ethyl ketone

to Annex II of MARPOL Ship Type: 3

73/78 and the IBC Code Pollution Category: Z

SECTION 15. Regulatory information



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

USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)
Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) (See chapter 3)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)
China Inv. Existing Chemical Substances (IECSC)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) (See chapter 3)

SECTION 16. Other information

Full text of H-Statements

H225 Highly flammable liquid and vapour.

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H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy of, or assume any liability for incomplete information contained herein or any advice given. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale.