

According to REACH Regulations (EC) 1907/2006 and (EU) 2020/878

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

1.1 Product identifier

Product code : GS2497
 Product name : Methyl Ethyl Ketone, GlenDry™, anhydrous
 CAS number : 78-93-3
 EINECS : 201-159-0
 Physical form : liquid, substance
 REACH : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company name	: Glentham Life Sciences Ltd	Telephone	: +44 (0) 1225 667 798
	Unit 5 Leafield Way	Fax	: +44 (0) 2033 978 909
	Corsham SN13 9SW	Email	: info@glentham.com
	United Kingdom	Web	: www.glentham.com

1.4 Emergency telephone number

Emergency telephone : NHS Direct 111 (UK, 24 hours), 112 (EU, 24 Hours), +44 (0) 1225 667 798 (09.00 – 17.00 GMT) number

2. Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP according to (EC) 1272/2008

H225	Flam. Liq. 2
H319	Eye Irr. 2A
H335	STOT SE 3
H336	STOT SE 3

2.2 Label elements

Label elements under CLP according to (EC) 1272/2008

Pictograms



GHS02 GHS07

Signal words

Danger

Hazard statements

H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or 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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P261	Avoid breathing vapors.
P241	Use explosion-proof electrical equipment.

2.3 Other hazards

PBT

This substance is not identified as a PBT substance.

3.0 Composition/information on ingredients

3.1 Substances

Name	Identifier	%	Classification
Methyl Ethyl Ketone, GlenDry™, anhydrous	CAS: 78-93-3 EC: 201-159-0 REACH: Not applicable	99.8%	H225, Flam. Liq. 2 H319, Eye Irr. 2A H335, STOT SE 3 H336, STOT SE 3

4. First aid measures

4.1 Description of first aid measures

Skin contact	Consult a doctor. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
Eye contact	Consult a doctor. Transfer to hospital for specialist examination. Bathe the eye with running water for 15 minutes.
Ingestion	Consult a doctor. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Wash out mouth with water.
Inhalation	Consult a doctor. Remove casualty from exposure ensuring one's own safety whilst doing so.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact	There may be mild irritation at the site of contact.
Eye contact	May cause permanent damage. The eyes may water profusely. The vision may become blurred. There may be irritation and redness. There may be pain and redness. There may be severe pain.
Ingestion	Nausea and stomach pain may occur. There may be irritation of the throat. There may be soreness and redness of the mouth and throat.
Inhalation	Drowsiness or mental confusion may occur. Nausea and stomach pain may occur. There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Delayed effects can be expected after long-term exposure. Drowsiness or mental confusion may occur. Immediate effects can be expected after short-term exposure. Nausea and stomach pain may occur.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

Do not induce vomiting. Eye bathing equipment should be available on the premises.

5. Fire-fighting measures

5.1 Extinguishing media

Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers. Water spray.

5.2 Special hazards arising from the substance or mixture

Exposure hazards

Highly flammable. In combustion emits toxic fumes. May form flammable / explosive dust-air mixture.

5.3 Advice for fire-fighters

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust. Eliminate all sources of ignition. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Notify the police and fire brigade immediately. 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 material for containment and cleaning up

Clean-up procedures

Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

6.4 Reference to other sections

Refer to section 8 of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Handling requirements

Avoid direct contact with the substance. Avoid the formation or spread of dust in the air. Do not handle in a confined space. Ensure there is exhaust ventilation of the area. Smoking is forbidden. Use non-sparking tools. Ensure there is sufficient ventilation of the area.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Avoid contact with water or humidity. Ensure lighting and electrical equipment are not a source of ignition. Keep away from sources of ignition. Keep container tightly closed. Prevent the build up of electrostatic charge in the immediate area. Store in cool, well ventilated area.

7.3 Specific end use(s)

No data available.

8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Substance (CAS)	Control Parameter	Value	Notes	Source
Butan-2-one (methyl ethyl ketone) (78-93-3)	Long-term Exposure Limit (ppm)	200	Sk, BMGV	UK HSE EH40/2005
	Long-term Exposure Limit (mg m ⁻³)	600		
	Short-term Exposure Limit (ppm)	300		
	Short-term Exposure Limit (mg m ⁻³)	899		
	Long-term Exposure Limit (ppm)	600		2000/39/EC
	Long-term Exposure Limit (mg m ⁻³)	200		
	Short-term Exposure Limit (ppm)	900		
	Short-term Exposure Limit (mg m ⁻³)	300		

Butanone (78-93-3)	Long-term Exposure Limit (ppm)	200	Sk, BMGV	UK HSE EH40/2005
	Long-term Exposure Limit (mg m ⁻³)	600		
	Short-term Exposure Limit (ppm)	300		
	Short-term Exposure Limit (mg m ⁻³)	899		
	Long-term Exposure Limit (ppm)	600	2000/39/EC	
	Long-term Exposure Limit (mg m ⁻³)	200		
	Short-term Exposure Limit (ppm)	900		
	Short-term Exposure Limit (mg m ⁻³)	300		

8.2 Exposure controls

Engineering measures	Ensure lighting and electrical equipment are not a source of ignition. Ensure there is exhaust ventilation of the area. Ensure there is sufficient ventilation of the area.
Respiratory protection	Respiratory protective device with particle filter. Self- contained breathing apparatus must be available in case of emergency.
Hand protection	Protective gloves.
Eye protection	Tightly fitting safety goggles. Ensure eye bath is to hand. Safety glasses.
Skin protection	Protective clothing.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Colourless
Odour	No data available.
Melting point/Freezing point	-86 °C
Boiling point/initial boiling point/boiling range	79.6 °C
Flammability	Highly flammable liquid and vapour
Lower/Upper explosion limit	No data available.
Flash Point	No data available.
Auto-ignition temperature	404°C
Decomposition temperature	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	22 g/L
Partition coefficient n-octanol/water	No data available.
Vapour pressure	No data available.
Density/relative density	0.805
Relative vapour pressure	No data available.
Particle characteristics	No data available.

9.2 Other information

No data available.

10. Stability and reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable at room temperature. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions

Decomposition may occur on exposure to conditions or materials listed below. Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid

Flames. Hot surfaces. Sources of ignition. Heat.

10.5 Incompatible materials

Materials to avoid

Carbon dioxide. Strong acids. Strong oxidising agents.

11. Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity

Butan-2-one (methyl ethyl ketone)

48 hr LC50 Orfe (Leuciscus idus) (Aquatic): 4600 mg/L

8 hr LC50 Rat (Inhalation): 23500 mg/m³

6 hr LC50 Rat (Inhalation): >5000 ppm

LD50 Rat (Oral): 3400 mg/kg

LD50 Rat (Oral): 2900 mg/kg

LD50 Rat (Oral): 5520 mg/kg

Butanone

48 hr LC50 Orfe (Leuciscus idus) (Aquatic): 4600 mg/L

8 hr LC50 Rat (Inhalation): 23500 mg/m³

6 hr LC50 Rat (Inhalation): >5000 ppm

LD50 Rat (Oral): 3400 mg/kg

LD50 Rat (Oral): 2900 mg/kg

LD50 Rat (Oral): 5520 mg/kg

b) Skin corrosion/irritation

No data available.

c) Serious eye damage/irritation

Serious eye damage/eye irritation (Category 2A)

d) Respiratory or skin sensitisation

No data available.

e) Germ cell mutagenicity

No data available.

f) Carcinogenicity

No data available.

g) Reproductive toxicity

No data available.

h) STOT-single exposure

Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3)

i) STOT-repeated exposure

No data available.

j) Aspiration hazard

No data available.

Symptoms / routes of exposure

Skin contact	There may be mild irritation at the site of contact.
Eye contact	May cause permanent damage. The eyes may water profusely. The vision may become blurred. There may be irritation and redness. There may be pain and redness. There may be severe pain.
Ingestion	Nausea and stomach pain may occur. There may be irritation of the throat. There may be soreness and redness of the mouth and throat.

Inhalation	Drowsiness or mental confusion may occur. Nausea and stomach pain may occur. There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Delayed effects can be expected after long-term exposure. Drowsiness or mental confusion may occur. Immediate effects can be expected after short-term exposure. Nausea and stomach pain may occur.
Other information	No data available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain known or suspected endocrine disruptors according to REACH or relevant EU Regulations.

11.2.2 Other information

No additional information

12. Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

Biodegradable.

12.3 Bioaccumulative potential

No bioaccumulation potential.

12.4 Mobility in soil

Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

This substance is not identified as a PBT substance.

12.6 Endocrine disrupting properties

This substance is not identified as having endocrine disrupting properties

12.7 Other adverse effects

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Disposal operations

Transfer to a suitable container and arrange for collection by specialised disposal company.

NB

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

14. Transport information

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN1193	UN1193	UN1193	UN1193	UN1193
14.2. UN proper shipping name				
ETHYL METHYL KETONE	ETHYL METHYL KETONE	Ethyl methyl ketone	ETHYL METHYL KETONE	ETHYL METHYL KETONE
Transport document description				
UN1193 ETHYL METHYL KETONE, 3, II	UN1193 ETHYL METHYL KETONE, 3, II	UN1193 Ethyl methyl ketone, 3, II	UN1193 ETHYL METHYL KETONE, 3, II	UN1193 ETHYL METHYL KETONE, 3, II

14.3. Transport hazard class(es)

3

3

3

3

3



14.4. Packing group

II

II

II

II

II

14.5. Environmental hazards

No

No

No

No

No

15. Regulatory information

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

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Authorisations/Restrictions

Regulation (EC) 1907/2006, REACH, Annex XIV list of substances subject to authorisation: No data available.

Regulation (EC) 1907/2006, REACH, Annex XVII restrictions on the manufacture, placing on the market and use of certain dangerous substances: No data available.

Regulation (EC) 1005/2009 on substances that deplete the ozone layer: No data available.

Regulation (EC) 850/2004 on persistent organic pollutants, amended by (EU) No 2019/1021: No data available.

15.2 Chemical safety assessment

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

16. Other information

H-Statement Full Texts

H225 Highly flammable liquid and vapour
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness

Abbreviations Full Texts

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
ALARP As low as is reasonably practicable
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulations
COSHH Control of Substances Hazardous to Health
EC Number European Community Number
EC50 Effective Concentration 50%
EILINCS European List of Notified Chemical Substances
EINECS European Inventory of Existing Commercial Chemical Substances
GHS Globally Harmonised System
HSE Health & Safety Executive UK
IATA International Air Transport Association
IM Intramuscular
IMDG The International Maritime Dangerous Goods Code
IP Intraperitoneal
IV Intravascular
LD50 Lethal Dose 50%
LOEC Lowest Observable Effective Concentration
LTEL Long Term Exposure Limit
NOEC No Observable Effective Concentration
OECD Organisation for Economic Cooperations and Development
PBT Persistent Bioaccumulative Toxic
PPE Personal Protective Equipment

REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail
SC	Subcutaneous
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
WEL	Workplace Exposure Limits

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Disclaimer: Glentham Life Sciences shall not be held liable for any damage resulting from handling or from contact with the above product. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This document does not guarantee the properties or quality of the product.

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