SAFETY DATA SHEET

Creation Date Oct-2013 **Revision Date** Oct-2018 **Revision Number** 2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification

Product Description:	**2-Butanone**
Product Grade:	SQ
Cat No. :	Q2351C
Synonyms	Methyl ethyl ketone; MEK; Ethyl methyl ketone
CAS-No	78-93-3
EC-No.	201-159-0
Molecular Formula	C4 H8 O
Reach Registration Number	01-2119457290-43

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

Recommended Use	Laboratory chemicals.
Sector of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category	PC21 - Laboratory chemicals
Process categories	PROC15 - Use as a laboratory reagent
Environmental release category	ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Uses advised against	No Information available

1.3. Details of the supplier of the safety data sheet

Company	Thermo Fisher Scientific India Pvt. Ltd 403-404, B-wing, Delphi, Hiranandani Business Park, Powai, Mumbai 400076, INDIA.
E-mail address	laboratorysolutions@thermofisher.com

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30
Chemtrec US: (800)424-9300
Chemtrec EU: 001(202)483-7616

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Flammable liquids	Category 2 (H225)

Health hazards

Serious Eye Damage/Eye Irritation	Category 2 (H319)
Specific target organ toxicity - (single exposure)	Category 3 (H336)

Environmental hazards
Based on available data, the classification criteria are not met

2.2. Label elements

Signal Word **Danger**

Hazard Statements

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P240 - Ground/Bond container and receiving equipment
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Methyl ethyl ketone	78-93-3	EEC No. 201-159-0	>95	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) (EUH066)

Reach Registration Number	01-2119457290-43

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Ingestion Do not induce vomiting. Obtain medical attention.

Inhalation Move to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

4.2. Most important symptoms and effects, both acute and delayed

Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
CO_2, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray.

Extinguishing media which must not be used for safety reasons
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Carbon monoxide (CO), Carbon dioxide (CO_2).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

6.2. Environmental precautions

Avoid release to the environment. See Section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Use spark-proof tools and explosion-proof equipment.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Use spark-proof tools and explosion-proof equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
List source(s): **EU** - Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement. **IRE -** 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Methyl ethyl ketone	TWA: 200 ppm 8 hr TWA: 600 mg/m³ 8 hr STEL: 300 ppm 15 min STEL: 900 mg/m³ 15 min	STEL: 300 ppm 15 min STEL: 899 mg/m³ 15 min TWA: 200 ppm 8 hr TWA: 600 mg/m³ 8 hr Skin	TWA / VME: 200 ppm (8 heures). restrictive limit TWA / VME: 600 mg/m³ (8 heures). restrictive limit STEL / VLCT: 300 ppm. restrictive limit STEL / VLCT: 900 mg/m³. restrictive limit Peau	TWA: 200 ppm 8 uren TWA: 600 mg/m³ 8 uren STEL: 300 ppm 15 minuten STEL: 900 mg/m³ 15 minuten	STEL / VLA-EC: 300 ppm (15 minutos). STEL / VLA-EC: 900 mg/m³ (15 minutos). TWA / VLA-ED: 200 ppm (8 horas) TWA / VLA-ED: 600 mg/m³ (8 horas)

Component	Italy	Germany	Portugal	The Netherlands	Finland
Methyl ethyl ketone	TWA: 200 ppm 8 ore. Media Ponderata nel Tempo TWA: 600 mg/m³ 8 ore. Media Ponderata nel Tempo STEL: 300 ppm 15 minuti. Breve termine STEL: 900 mg/m³ 15 minuti. Breve termine	TWA: 200 ppm (8 Stunden). AGW - exposure factor 1 TWA: 600 mg/m³ (8 Stunden). AGW - exposure factor 1 TWA: 200 ppm (8 Stunden). MAK TWA: 600 mg/m³ (8 Stunden). MAK Höhepunkt: 200 ppm Höhepunkt: 600 mg/m³ Haut	STEL: 300 ppm 15 minutos STEL: 900 mg/m³ 15 minutos TWA: 200 ppm 8 horas TWA: 600 mg/m³ 8 horas	huid STEL: 900 mg/m³ 15 minuten TWA: 590 mg/m³ 8 uren	STEL: 100 ppm 15 minuutteina STEL: 300 mg/m³ 15 minuutteina Iho

Component	Austria	Denmark	Switzerland	Poland	Norway
Methyl ethyl ketone	Haut MAK-KZW: 200 ppm 15 Minuten MAK-KZW: 590 mg/m³ 15 Minuten	TWA: 50 ppm 8 timer TWA: 145 mg/m³ 8 timer Hud	Haut/Peau STEL: 200 ppm 15 Minuten STEL: 590 mg/m³ 15 Minuten	STEL: 900 mg/m³ 15 minutach TWA: 450 mg/m³ 8 godzinach	TWA: 75 ppm 8 timer TWA: 220 mg/m³ 8 timer STEL: 75 ppm 15 minutter. STEL: 220 mg/m³ 15

	MAK-TMW: 100 ppm 8 Stunden MAK-TMW: 295 mg/m³ 8 Stunden		TWA: 200 ppm 8 Stunden TWA: 590 mg/m³ 8 Stunden		minutter.

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Methyl ethyl ketone	TWA: 590 mg/m³ STEL : 885 mg/m³	kože TWA-GVI: 200 ppm 8 satima. TWA-GVI: 600 mg/m³ 8 satima. STEL-KGVI: 300 ppm 15 minutama. STEL-KGVI: 900 mg/m³ 15 minutama.	TWA: 200 ppm 8 hr. TWA: 600 mg/m³ 8 hr. STEL: 300 ppm 15 min STEL: 900 mg/m³ 15 min Skin	STEL: 300 ppm STEL: 900 mg/m³ TWA: 200 ppm TWA: 600 mg/m³	TWA: 600 mg/m³ 8 hodinách. Ceiling: 900 mg/m³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Methyl ethyl ketone	TWA: 200 ppm 8 tundides. TWA: 600 mg/m³ 8 tundides. STEL: 300 ppm 15 minutites. STEL: 900 mg/m³ 15 minutites.	TWA: 200 ppm 8 hr TWA: 600 mg/m³ 8 hr STEL: 300 ppm 15 min STEL: 900 mg/m³ 15 min	STEL: 300 ppm STEL: 900 mg/m³ TWA: 200 ppm TWA: 600 mg/m³	STEL: 900 mg/m³ 15 percekben. CK TWA: 600 mg/m³ 8 órában. AK lehetséges borön keresztüli felszívódás	STEL: 300 ppm STEL: 900 mg/m³ TWA: 50 ppm 8 klukkustundum. TWA: 145 mg/m³ 8 klukkustundum. Skin notation Ceiling: 100 ppm Ceiling: 290 mg/m³

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Methyl ethyl ketone	STEL: 300 ppm STEL: 900 mg/m³ TWA: 67 ppm TWA: 200 mg/m³	TWA: 200 ppm IPRD TWA: 600 mg/m³ IPRD STEL: 300 ppm STEL: 900 mg/m³	TWA: 200 ppm 8 Stunden TWA: 600 mg/m³ 8 Stunden STEL: 300 ppm 15 Minuten STEL: 900 mg/m³ 15 Minuten	TWA: 200 ppm TWA: 600 mg/m³ STEL: 300 ppm 15 minuti STEL: 900 mg/m³ 15 minuti	TWA: 200 ppm 8 ore TWA: 600 mg/m³ 8 ore STEL: 300 ppm 15 minute STEL: 900 mg/m³ 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Methyl ethyl ketone	TWA: 200 mg/m³ 0403 STEL: 400 mg/m³ 0403	Ceiling: 900 mg/m³ TWA: 200 ppm TWA: 600 mg/m³	TWA: 200 ppm 8 urah TWA: 600 mg/m³ 8 urah STEL: 300 ppm 15 minutah STEL: 900 mg/m³ 15 minutah	Binding STLV: 300 ppm 15 minuter Binding STLV: 900 mg/m³ 15 minuter LLV: 50 ppm 8 timmar. LLV: 150 mg/m³ 8 timmar.	TWA: 200 ppm 8 saat TWA: 600 mg/m³ 8 saat STEL: 300 ppm 15 dakika STEL: 900 mg/m³ 15 dakika

Biological limit values

List source(s): **UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

Component	European Union	United Kingdom	France	Spain	Germany
Methyl ethyl ketone		Butan-2-one: 70 µmol/L urine post shift	Methylethylketone: 2 mg/L urine end of shift	Methyl ethyl ketone: 2 mg/L urine end of shift	2-Butanone: 2 mg/L urine (end of shift)

Component	Italy	Finland	Denmark	Bulgaria	Romania
Methyl ethyl ketone					Methylethylketone: 2 mg/L urine end of shift

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
MDHS70 General methods for sampling airborne gases and vapours
MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography
MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas

chromatography

Derived No Effect Level (DNEL) Workers

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				1161 mg/kg
Inhalation				600 mg/m³

Predicted No Effect Concentration (PNEC) See values below.

Fresh water	55.8 mg/l
Fresh water sediment	284.74 mg/kg
Marine water	55.8 mg/l
Marine water sediment	287.7 mg/kg
Water Intermittent	55.8 mg/l
Soil (Agriculture)	22.5 mg/kg

8.2. Exposure controls

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.
Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	< 60 minutes	0.5 mm	Level 4 EN 374	Permeation rate 36 µg/cm2/min As tested under EN374-3 Determination of Resistance to Permeation by Chemicals

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Recommended Filter type: Type A Organic gases and vapours filter Brown conforming to EN14387

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Colorless	
Physical State	Liquid	
Odor	Characteristic - sweet	
Odor Threshold	No data available	
pH	No information available	
Melting Point/Range	-87 °C / -124.6 °F	
Softening Point	No data available	
Boiling Point/Range	80 °C / 176 °F	
Flash Point	-7 °C / 19.4 °F	**Method -** Closed cup
Evaporation Rate	3.7	(Butyl Acetate = 1.0)
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	**Lower** 1.8 Vol%	
	Upper 11.5 Vol%	
Vapor Pressure	105 mbar @ 20 °C	
Vapor Density	2.41	(Air = 1.0)
Specific Gravity / Density	0.806	
Bulk Density	Not applicable	Liquid
Water Solubility	290 g/L (20°C)	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	**log Pow**	
Methyl ethyl ketone	0.29	
Autoignition Temperature	404 °C / 759.2 °F	
Decomposition Temperature	No data available	
Viscosity	0.42 mPa.s @ 15°C	
Explosive Properties	Not explosive	Vapors may form explosive mixtures with air
Oxidizing Properties	Not oxidising	

9.2. Other information

Molecular Formula	C4 H8 O
Molecular Weight	72.11

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases. Strong reducing agents. Ammonia. copper. Amines.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO_2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met
Dermal Based on available data, the classification criteria are not met
Inhalation Based on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl ethyl ketone	LD50 = 2483 mg/kg (Rat) LD50 = 2737 mg/kg (Rat)	LD50 = 5000 mg/kg (Rabbit) LD50 = 6480 mg/kg (Rabbit)	LC50 = 11700 ppm (Rat) 4 h

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory Based on available data, the classification criteria are not met
Skin Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

Not mutagenic in AMES Test

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Category 3

Results / Target organs Central nervous system (CNS).

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(j) aspiration hazard; Based on available data, the classification criteria are not met

Symptoms / effects,both acute and delayed Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects .

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Methyl ethyl ketone	Lepomis macrochirus: LC50=3,22 g/L 96 h	EC50: 4025 - 6440 mg/L, 48h Static (Daphnia magna) EC50: = 5091 mg/L, 48h (Daphnia magna) EC50: > 520 mg/L, 48h (Daphnia magna)		EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min

12.2. Persistence and degradability Readily biodegradable

Persistence Persistence is unlikely, based on information available.

Component	Degradability
Methyl ethyl ketone	98% (28d)

78-93-3 (>95)	

12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Methyl ethyl ketone	0.29	No data available

12.4. Mobility in soil The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in air

12.5. Results of PBT and vPvB assessment Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

Persistent Organic Pollutant This product does not contain any known or suspected substance

Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

European Waste Catalogue (EWC) According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Other Information Waste codes should be assigned by the user based on the application for which the product was used. Do not dispose of waste into sewer. Can be incinerated, when in compliance with local regulations.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN1193
14.2. UN proper shipping name Ethyl methyl ketone (Methyl ethyl ketone)
14.3. Transport hazard class(es) 3
14.4. Packing group II

ADR

14.1. UN number UN1193
14.2. UN proper shipping name Ethyl methyl ketone (Methyl ethyl ketone)
14.3. Transport hazard class(es) 3
14.4. Packing group II

IATA

14.1. UN number UN1193
14.2. UN proper shipping name Methyl ethyl ketone
14.3. Transport hazard class(es) 3
14.4. Packing group II

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Methyl ethyl ketone	201-159-0	-		X	X	-	X	X	X	X	X

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Methyl ethyl ketone	WGK 1	

Component	France - INRS (Tables of occupational diseases)
Methyl ethyl ketone	Tableaux des maladies professionnelles (TMP) - RG 84

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.
Take note of Dir 94/33/EC on the protection of young people at work
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
EUH066 - Repeated exposure may cause skin dryness or cracking

Legend

CAS - Chemical Abstracts Service
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit
TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level
PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment
LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%
EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration
POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic
vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code
MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and Development
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
VOC - Volatile Organic Compounds

Key literature references and sources for data
Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
First aid for chemical exposure, including the use of eye wash and safety showers.
Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Creation Date	Oct-2013
Next Revision Date	Oct-2023
Revision Summary	SDS section 1 updated and update of Format

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet