

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 00108 Issue date: 3/12/2024 Revision date: 3/12/2024 Supersedes version of: 4/9/2015 Version: 1.0

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

1.1. Product identifier	
Product form Trade name IUPAC name EC Index-No. EC-No. CAS-No. Product code Type of product Formula Chemical structure	: Substance : DI-iso-PROPYL ETHER (STABILIZED WITH BHT) FOR SYNTHESIS : 2-[(Propan-2-yl)oxy]propane : 603-045-00-X : 203-560-6 : 108-20-3 : 00108 : Ethers : C6H14O : $CH_3 CH_3$ $H_3C - CH_3$
Synonyms	: iso-Propyl ether, 2-iso-Propoxypropane, Diisopropyl oxide, DIPE
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against
 1.2.1. Relevant identified uses Use of the substance/mixture Use of the substance/mixture 1.2.2. Uses advised against No additional information available 1.3. Details of the supplier of the safety data to the supplicit of the safety data to	: Laboratory chemicals, Manufacture of substances : Solvents
1.4. Emergency telephone number	
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)
SECTION 2: Hazards identification	

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2	H225
Specific target organ toxicity – Single exposure, Category 3,	H336
Narcosis	
Full text of H- and EUH-statements; see section 16	

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness.

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2.2. Label elements	
Labelling according to Regulation (EC) No. 1	272/2008 [CLP]
Hazard pictograms (CLP)	GHS02 GHS07
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour. H336 - May cause drowsiness or dizziness.
Precautionary statements (CLP)	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
EUH-statements	EUH019 - May form explosive peroxides. EUH066 - Repeated exposure may cause skin dryness or cracking.
2.3. Other hazards	

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type :	Mono-constituent	
Name	Product identifier	%
DI-iso-PROPYL ETHER	CAS-No.: 108-20-3 EC-No.: 203-560-6 EC Index-No.: 603-045-00-X	≤ 100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures	i
First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	 Rinse skin with water/shower. Take off immediately all contaminated clothing. Repeated exposure may cause skin dryness or cracking.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. If you feel unwell, seek medical advice. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/offects offer ingestion	· None under normal conditions

Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

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SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	 dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam. Carbon dioxide. Do not use a heavy water stream. 	
5.2. Special hazards arising from the subst		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form explosive peroxides. Toxic fumes may be released. 	
5.3. Advice for firefighters	. Toxic futiles may be released.	
Firefighting instructions	: DO NOT fight fire when fire reaches explosives. Evacuate area. Do not enter fire area without proper protective equipment, including respiratory protection.	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
6.1.1. For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment.	
Emergency procedures	: Ventilate spillage area. Do not breathe vapours. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for contain	nment and cleaning up	
For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.	
Methods for cleaning up	Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters.	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		
For further information refer to section 13.		

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SECTION 7: Handling and storag	e
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable. Hazardous waste due to potential risk of explosion.
Precautions for safe handling	No open flames. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu-	uding any incompatibilities
Technical measures	 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Incompatible products	: Oxidizing agent.
Incompatible materials	: Heat sources.
Packaging materials	: Store always product in container of same material as original container.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Chemical goggles or safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Clear liquid.
Molecular mass	: 102.18 g/mol
Odour	: Sweet. sharp, ethereal odor.
Odour threshold	: Not available
Melting point	: -60 °C
Freezing point	: Not available
Boiling point	: 68.5 °C
Flammability	: Flammable
	Highly flammable liquid and vapour.
Explosive properties	: May form explosive peroxides.
Lower explosion limit	: 1 vol %
Upper explosion limit	: 21 vol %
Flash point	: -28 °C
Auto-ignition temperature	: 443 °C
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: 0.455 mm²/s
Viscosity, dynamic	: 0.33 mPa⋅s at 20 °C
Solubility	: Water: 2 g/l at 20 °C
	Ethanol: Miscible
	Ether: Miscible
	Acetone: Miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 119 mm Hg at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 0.725 g/cm³ at 20 °C
Relative density	: 0.73

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Relative vapour density at 20°C Particle characteristics	: 3.5 (Air= 1) : Not applicable	
9.2. Other information		
9.2.1. Information with regard to physical haz No additional information available	ard classes	
9.2.2. Other safety characteristics		
Relative evaporation rate (butylacetate=1) Refractive index	: 8 : 1.367 – 1.369 (20 °C, 589 nm)	

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture. May form explosive peroxides.

10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids.

10.4. Conditions to avoid

Open flame. Direct sunlight. Heat. Sparks. Overheating. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

May release flammable gases. May form explosive peroxides.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

SECTION 11: Toxicological information

	5 ()
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Additional information	: Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
DI-iso-PROPYL ETHER (STABILIZE	ED WITH BHT) FOR SYNTHESIS (108-20-3)

Viscosity, kinematic

0.455 mm²/s

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general Hazardous to the aquatic environment, short–term	 The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified 	
(acute) Hazardous to the aquatic environment, long–term (chronic)	: Not classified	
12.2. Persistence and degradability		
DI-iso-PROPYL ETHER (STABILIZED WITH BHT) FOR SYNTHESIS (108-20-3)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	: Handle empty containers with care because residual vapours are flammable. Hazardous

container. Do not re-use empty containers.

waste due to potential risk of explosion. Flammable vapours may accumulate in the

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number	
UN-No. (ADR)	: UN 1159
UN-No. (IMDG)	: UN 1159
UN-No. (IATA)	: UN 1159
UN-No. (ADN)	: UN 1159
UN-No. (RID)	: UN 1159

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: DIISOPROPYL ETHER
: DIISOPROPYL ETHER
: UN 1159 DIISOPROPYL ETHER, 3, II, (D/E)
: UN 1159 DIISOPROPYL ETHER, 3, II (-29°C c.c.)
: UN 1159 Diisopropyl ether, 3, II
: UN 1159 DIISOPROPYL ETHER, 3, II
: UN 1159 DIISOPROPYL ETHER, 3, II

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR)
Danger labels (ADR)



Danger labels (IMDG)

IMDG

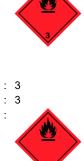
IATA Transport hazard class(es) (IATA) Danger labels (IATA)

Transport hazard class(es) (IMDG)

ADN Transport hazard class(es) (ADN) Danger labels (ADN)

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Transport hazard class(es) (RID)	
Danger labels (RID)	



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14.4. Packing group

Packing group (ADR)
Packing group (IMDG)
Packing group (IATA)

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Packing group (ADN)	: 11
Packing group (RID)	: II
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant Other information	: No : No supplementary information available
14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	: F1
Limited quantities (ADR)	: 11
	: E2
Packing instructions (ADR)	: P001, IBC02, R001
	: MP19
Portable tank and bulk container instructions (ADR)	
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
	: FL
0	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	33
	1159
EAC code	: 3YE
Transport by sea	
Limited quantities (IMDG)	: 1L
	: E2
5	: P001
1 5	: IBC02
Tank instructions (IMDG) Tank special provisions (IMDG)	: T4 : TP1
	· / F · E
	: S-D
	: E
	: SW2
Flash point (IMDG)	: -29°C c.c.
Properties and observations (IMDG)	: Colourless liquid with an ether-like odour. Flashpoint: -29°C c.c. Explosive limits: 1.1% to
	21%. Immiscible with water. In the presence of oxygen or on long standing or exposure to
	sunlight, unstable peroxides sometimes form; these may explode spontaneously or when
MFAG-No	heated. Strongly narcotic. Readily ignited by static electricity. : 127
Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
	: 1L . 252
	: 353 : 5L
PCA max net quantity (IATA) CAO packing instructions (IATA)	: 5L : 364
CAO max net quantity (IATA)	: 60L
	: 3H
Inland waterway transport	
()	: F1
,	: 1L · F2
Excepted quantities (ADN)	: E2

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Carriage permitted (ADN) Equipment required (ADN) Ventilation (ADN) Number of blue cones/lights (ADN)	: T : PP, EX, A : VE01 : 1
Rail transportClassification code (RID)Limited quantities (RID)Excepted quantities (RID)Packing instructions (RID)Packing provisions (RID)Portable tank and bulk container instructions (RID)Portable tank and bulk container special provisions(RID)Tank codes for RID tanks (RID)Transport category (RID)Colis express (express parcels) (RID)	
Hazard identification number (RID)	: 33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	DI-iso-PROPYL ETHER (STABILIZED WITH BHT) FOR SYNTHESIS
3(b)	DI-iso-PROPYL ETHER (STABILIZED WITH BHT) FOR SYNTHESIS
40.	DI-iso-PROPYL ETHER (STABILIZED WITH BHT) FOR SYNTHESIS

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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15.1.2. National regulations

France

Occupational diseases			
Code D	Description		
h a d	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide		
Germany			
Water hazard class (WGK) Hazardous Incident Ordinance	e (12. BImSchV)	 WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 598). Is not subject to the Hazardous Incident Ordinance (12. BImSchV) 	
Netherlands			
SZW-lijst van kankerverwekke	ende stoffen	: The substance is not listed	
SZW-lijst van mutagene stoffen		: The substance is not listed	
SZW-lijst van reprotoxische st	0	: The substance is not listed	
SZW-lijst van reprotoxische sto √ruchtbaarheid	toffen –	: The substance is not listed	
SZW-lijst van reprotoxische st	toffen – Ontwikkeling	: The substance is not listed	
Denmark			
Classification remarks Danish National Regulations		 Emergency management guidelines for the storage of flammable liquids must be followed Young people below the age of 18 years are not allowed to use the product 	
15.2. Chemical safety ass	sessment		

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	

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Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.