Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 00251

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

1.1. Product identifier

Product form : Substance

Trade name : PETROLEUM ETHER 100-120°C FOR SYNTHESIS

 EC Index-No.
 : 649-263-00-9

 EC-No.
 : 232-453-7

 CAS-No.
 : 8032-32-4

 Product code
 : B-01137

Type of product : Mixture of hydrocarbons

Synonyms : Ligroine, Petroleum benzine 100 - 120°C, Petroleum spirit

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

Use of the substance/mixture : Solvents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals

5455, Nicholson Road Science Market, Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

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
Skin corrosion/irritation, Category 2 H315
Reproductive toxicity, Category 2 H361f
Specific target organ toxicity – Single exposure, Category 3, H336

Narcosis

Specific target organ toxicity – Repeated exposure, Category 2 H373
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment – Chronic Hazard, H411

Category 2

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

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2.2. Label elements

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

Hazard pictograms (CLP)









GHS02

GHS07

GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness. H361f - Suspected of damaging fertility.

H373 - May cause damage to organs through prolonged or repeated exposure.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P273 - Avoid release to the environment.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P331 - Do NOT induce vomiting.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Multi-constituent

Name : PETROLEUM ETHER 100-120°C

CAS-No. : 8032-32-4 EC-No. : 232-453-7 EC Index-No. : 649-263-00-9

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after skin contact

First-aid measures general : Call a physician immediately.

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. Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention. Rinse skin with water/shower. Take off immediately all contaminated

clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Immediately call a POISON CENTER/doctor. Rinse mouth. Do not induce vomiting. Call a

physician immediately.

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

Symptoms/effects : May cause genetic defects. May cause cancer. Causes damage to organs. May cause

drowsiness or dizziness.

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Symptoms/effects after inhalation : May cause drowsiness or dizziness. Symptoms/effects after skin contact : Causes skin irritation. Irritation.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide, Water spray, Foam, Dry powder, Water spray,

Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and

no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and

eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective

equipment as required. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. On land, sweep or shovel into suitable

containers. Collect spillage. 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 storage

7.1. Precautions for safe handling

Additional hazards when processed Precautions for safe handling

- : Handle empty containers with care because residual vapours are flammable.
- Avoid contact with skin and eyes. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapours. Keep away from sources of ignition No smoking. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment.

Storage conditions

: Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep

cool. Store locked up.

Incompatible materials

: Heat sources.

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 symbol(s):







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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.

Odour : gasoline or kerosene. Odour threshold : Not available Melting point : < -73 °C Freezing point : Not available

: 100 - 120 °C Boiling point Flammability : Flammable

Highly flammable liquid and vapour.

Lower explosion limit : 0,8 vol % Upper explosion limit : 8 vol % : -10 °C Flash point : 250 °C Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ : Not available Viscosity, kinematic

: Water: Immiscible in water Solubility

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : 40 mm Hg at 20°C Vapour pressure at 50 °C : Not available

: 0,7 - 0,73 g/ml at 25°C Density

Relative density : Not available Relative vapour density at 20 °C : 2,5 (Air=1) Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : 10 Relative evaporation rate (ether=1) : <

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified : Not classified Acute toxicity (dermal) Acute toxicity (inhalation) : Not classified Skin corrosion/irritation Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified : Not classified Carcinogenicity

Reproductive toxicity : Suspected of damaging fertility.

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Ecology - water : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Toxic to aquatic life with long lasting effects.

(chronic)

12.2. Persistence and degradability

PETROLEUM ETHER 100-120°C FOR SYNTHESIS (8032-32-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.

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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

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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.

Additional information : Handle empty containers with care because residual vapours are flammable. Flammable

vapours may accumulate in the container.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

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

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 1268

 UN-No. (IMDG)
 : UN 1268

 UN-No. (IATA)
 : UN 1268

 UN-No. (ADN)
 : UN 1268

 UN-No. (RID)
 : UN 1268

14.2. UN proper shipping name

Proper Shipping Name (ADR) : PETROLEUM DISTILLATES, N.O.S.
Proper Shipping Name (IMDG) : PETROLEUM DISTILLATES, N.O.S.

Proper Shipping Name (IATA) : Petroleum distillates, n.o.s.

Proper Shipping Name (ADN) : PETROLEUM DISTILLATES, N.O.S. Proper Shipping Name (RID) : PETROLEUM DISTILLATES, N.O.S.

Transport document description (ADR) : UN 1268 PETROLEUM DISTILLATES, N.O.S. (PETROLEUM ETHER 100-120°C), 3, II,

(D/E)

Transport document description (IMDG) : UN 1268 PETROLEUM DISTILLATES, N.O.S., 3, II, MARINE

POLLUTANT/ENVIRONMENTALLY HAZARDOUS

Transport document description (IATA) : UN 1268 Petroleum distillates, n.o.s., 3, II, ENVIRONMENTALLY HAZARDOUS

Transport document description (ADN)

: UN 1268 PETROLEUM DISTILLATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)

: UN 1268 PETROLEUM DISTILLATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3

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IMDG

Transport hazard class(es) (IMDG) 3

Danger labels (IMDG)



IATA

Transport hazard class(es) (IATA) : 3 3 Danger labels (IATA)



ADN

Transport hazard class(es) (ADN) 3

Danger labels (ADN)



RID

Transport hazard class(es) (RID) : 3 3

Danger labels (RID)



14.4. Packing group

Packing group (ADR) : 11 : 11 Packing group (IMDG) : 11 Packing group (IATA) : II Packing group (ADN) Packing group (RID) : 11

14.5. Environmental hazards

Dangerous for the environment : Yes Marine pollutant Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1 : 640C, 664 Special provisions (ADR) Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2 Packing instructions (ADR) : P001 Mixed packing provisions (ADR) : MP19 Portable tank and bulk container instructions (ADR) : T7

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Portable tank and bulk container special provisions : TP1, TP8, TP28

: L1.5BN Tank code (ADR) Vehicle for tank carriage : FL Transport category (ADR) 2 Special provisions for carriage - Operation (ADR) S2, S20 Hazard identification number (Kemler No.) 33

Orange plates

33 1268

Tunnel restriction code (ADR) D/E EAC code 3YE

Transport by sea

Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T7

Tank special provisions (IMDG) : TP1, TP8, TP28

EmS-No. (Fire) : F-E : S-E EmS-No. (Spillage) Stowage category (IMDG) : B

: Immiscible with water. Properties and observations (IMDG)

MFAG-No : 128

Air transport

: E2 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L : 364 CAO packing instructions (IATA) : 60L CAO max net quantity (IATA) Special provisions (IATA) : A3 ERG code (IATA) : 3H

Inland waterway transport

Classification code (ADN) : F1 : 640C Special provisions (ADN) : 1 L Limited quantities (ADN) Excepted quantities (ADN) E2 Carriage permitted (ADN) Т Equipment required (ADN) : PP, EX, A Ventilation (ADN) VE01 Number of blue cones/lights (ADN) 1

Rail transport

: F1 Classification code (RID) Special provisions (RID) : 640C Limited quantities (RID) : 1L Excepted quantities (RID) : E2 Packing instructions (RID) : P001 Mixed packing provisions (RID) : MP19 Portable tank and bulk container instructions (RID) : T7

Portable tank and bulk container special provisions : TP1, TP8, TP28

(RID)

Tank codes for RID tanks (RID) : L1.5BN Transport category (RID) : 2 Colis express (express parcels) (RID) : CE7 Hazard identification number (RID) : 33

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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)	PETROLEUM ETHER 100-120°C FOR SYNTHESIS
3(b)	PETROLEUM ETHER 100-120°C FOR SYNTHESIS
3(c)	PETROLEUM ETHER 100-120°C FOR SYNTHESIS
40.	PETROLEUM ETHER 100-120°C FOR SYNTHESIS

REACH Annex XIV (Authorisation List)

PETROLEUM ETHER 100-120°C FOR SYNTHESIS is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

PETROLEUM ETHER 100-120°C FOR SYNTHESIS is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

PETROLEUM ETHER 100-120°C FOR SYNTHESIS is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

PETROLEUM ETHER 100-120°C FOR SYNTHESIS is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

PETROLEUM ETHER 100-120°C is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV; ID No. 9162).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : PETROLEUM ETHER 100-120°C is listed SZW-lijst van mutagene stoffen : PETROLEUM ETHER 100-120°C is listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

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Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

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	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
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	
PBT	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	

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Abbreviations and acr	breviations and acronyms:	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Asp. Tox. 1	Aspiration hazard, Category 1	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H336	May cause drowsiness or dizziness.	
H361f	Suspected of damaging fertility.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting effects.	
Repr. 2	Reproductive toxicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
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.