Petroleum ether

32299-2.5L

Version 1.9 Revision Date 06.11.2025

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

1.1. Product identifier

Product name	:	Petroleum ether
SDS-number	:	000000021335
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Solstice Advanced Materials US, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:	(49) 5137-999 0	
For further information, please contact:	:	SafetyDataSheet@solstice.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1 303-739-1378 (Medical)
	:	Poison Control Center: United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids Category 2
H225 Highly flammable liquid and vapour.
Skin irritation Category 2
H315 Causes skin irritation.
Specific target organ toxicity - single exposure Category 3 - Central nervous system
H336 May cause drowsiness or dizziness.
Aspiration hazard Category 1
H304 May be fatal if swallowed and enters airways.
Long-term (chronic) aquatic hazard Category 2
H411 Toxic to aquatic life with long lasting effects.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Danger

Hazard statements :	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.
	H411	Toxic to aquatic life with long lasting effects.
	EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements :	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P280	Wear protective gloves/ eye protection/ face protection.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove person to fresh

	P308 + P313	air and keep comfortable for breathing. IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label : Hydrocarbons, C6, Isoalkanes, <5% n-Hexane

2.3. Other hazards

Vapours may form explosive mixtures with air. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	64742-49-0 601-007-00-7 931-254-9	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336; Central nervous system Asp. Tox. 1; H304 Aquatic Chronic 2; H411	> 50 % - <= 100 %	
pentane	109-66-0 601-006-00-1 203-692-4	Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336; Central nervous system Aquatic Chronic 2; H411 EUH066	>= 25 % - <= 50 %	

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
First aider needs to protect himself. Move out of dangerous area. If unconscious, place in recovery position and seek medical advice. Immediately take off contaminated clothing and rinse body with plenty of water.

Inhalation:
In case of accident by inhalation: remove casualty to fresh air and keep at rest. If symptoms persist, call a physician.

Skin contact:
After contact with skin, wash immediately with plenty of water. Get medical attention if irritation develops and persists.

Eye contact:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Call a physician immediately. Remove contact lenses.

Ingestion:
When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Show this safety data sheet to the doctor in attendance.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Foam
Carbon dioxide (CO2)
Dry powder

Extinguishing media which shall not be used for safety reasons:
High volume water jet

5.2. Special hazards arising from the substance or mixture

Heating will cause pressure rise with risk of bursting
Do not use a solid water stream as it may scatter and spread fire.
Cool closed containers exposed to fire with water spray.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.Use water spray to cool unopened containers.Do not use a solid water stream as it may scatter and spread fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Unprotected persons must be kept away. Ensure adequate ventilation. Remove all sources of ignition. Pay attention to flashback.

6.2. Environmental precautions

Do not let product enter drains. The product evaporates readily. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Remove from surface water (e.g. by skimming or siphoning).

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

Pick for disposal in tightly closed containers
Use low-sparking handtools and explosion-proof electrical equipment
Remove from surface water (e.g. by skimming or siphoning).

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Perform filling operations only at stations with exhaust ventilation facilities. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.

Advice on protection against fire and explosion:
The heavy vapours can overcome a considerable distance up to the source of ignition. Render equipment and apparatus inert (nitrogen, inert gases) and earth before putting into operation. Labeling danger zone "risk of explosion". Use only in explosion-proof areas. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep product and empty container away from heat and sources of ignition.

Hygiene measures:
Keep working clothes separately. Separate rooms are required for washing, showering and changing clothes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in area designed for storage of flammable liquids. Protect from physical damage.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	TWA	1.200 mg/m3		RCP hydrocarbons
pentane	EU ELV TWA	3.000 mg/m3 1.000 ppm		Indicative
pentane	EH40 WEL TWA	1.800 mg/m3 600 ppm		

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TWA - Time weighted average (TWA):
EU ELV - EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended
TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	Workers / Long-term systemic effects		5306 mg/m3	Inhalation	
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	Workers / Long-term systemic effects		13964mg/kg bw/d	Dermal	
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	Consumers / Long-term systemic effects		1131 mg/m3	Inhalation	
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	Consumers / Long-term		1377mg/kg bw/d	Dermal	

	systemic effects				
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	Consumers / Long-term systemic effects		1301mg/kg bw/d	Ingestion	
pentane	Workers / Long-term systemic effects		3000 mg/m3	Inhalation	
pentane	Workers / Long-term systemic effects		432mg/kg bw/d	Skin contact	
pentane	Consumers / Long-term systemic effects		643 mg/m3	Inhalation	
pentane	Consumers / Long-term systemic effects		214mg/kg bw/d	Skin contact	
pentane	Consumers / Long-term systemic effects		214mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	:	No data available
pentane	Fresh water: 0,23 mg/l	
pentane	Marine water: 0,23 mg/l	
pentane	Sewage treatment plant: 3,6 mg/l	
pentane	Fresh water sediment: 1,2 mg/kg dw	
pentane	Marine sediment: 1,2 mg/kg dw	
pentane	Soil: 0,55 mg/kg dw	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.
Ensure that eyewash stations and safety showers are close to the workstation location.
Avoid contact with skin, eyes and clothing.
Recommended preventive skin protection

Engineering measures
Take measures to prevent the build up of electrostatic charge.
Use explosion-proof equipment.
Local exhaust
Electrical equipment should be protected to the appropriate standard.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.
Recommended Filter type:
Organic gas and low boiling vapour type

Hand protection:
Glove material: Nitrile rubber
Break through time: > 480 min
Glove thickness: 0,4 mm
Camatril® 730
Gloves must be inspected prior to use.
Replace when worn.
Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Wear suitable protective equipment.
Protective suit
Flame retardant antistatic protective clothing.
Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire.

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	:	liquid
(b) Colour	:	colourless
(c) Odour	:	characteristic
(d) Melting point/freezing point	:	No data available
(e) Boiling point/boiling range	:	40 - 60 °C at 1.013 hPa
(f) Flammability	:	Not applicable
(g) Lower and upper explosion limit	:	Lower explosion limit 1 %(V)
	:	Upper explosion limit 7 %(V)
(h) Flash point	:	< -30 °C Method: DIN 51755
(i) Auto-ignition temperature	:	245 °C not auto-flammable

(j) Decomposition temperature	:	At normal pressure may be distilled without decomposition. Fire or intense heat may cause violent rupture of packages.
(k) pH	:	Not applicable
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: practically insoluble Solubility in other solvents: Soluble in most organic solvents
(n) Partition coefficient: n-octanol/water	:	No data available
(o) Vapour pressure	:	No data available
(p) Density and / or relative density	:	0,65 g/cm3 at 20 °C
(q) Bulk density	:	Not applicable
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

At normal pressure may be distilled without decomposition.
Fire or intense heat may cause violent rupture of packages.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Keep away from heat and sources of ignition.
Keep away from direct sunlight.

10.5. Incompatible materials

Evolution of inflammable gases/vapours easily.
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.
Incompatible with oxidizing agents.
Explosive reactions with oxidising agents such as potassium chlorate and/or peroxides.

10.6. Hazardous decomposition products

At normal pressure may be distilled without decomposition.
Hazardous decomposition products formed under fire conditions.
Carbon monoxide
Hydrocarbons
Carbon dioxide (CO2)

SECTION 11: Toxicological information

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

(a) Acute toxicity

Acute oral toxicity:
No data available

Acute dermal toxicity:
No data available

Acute inhalation toxicity:
No data available

Acute toxicity (other routes of administration):
No data available

(b) Skin corrosion/irritation:
Classification based on Annex VI of regulation 1272/2008/EC.

(c) Serious eye damage/eye irritation:
No data available

(d) Respiratory or skin sensitisation:
No data available

(f) Carcinogenicity:
Note: No data available

(g) Reproductive toxicity:
Remarks: No data available

(h) STOT-single exposure:
Assessment: May cause drowsiness or dizziness.

(i) STOT - repeated exposure:
No data available
STOT - repeated exposure:
Remarks: No data available

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

11.2. Information on other hazards

Endocrine disrupting properties
No data available

Other information:
May cause drowsiness or dizziness.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
No data available

Toxicity to aquatic plants:
No data available

Toxicity to Microorganisms:
No data available

Toxicity to aquatic invertebrates:
No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Do not flush into surface water or sanitary sewer system.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006
For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number
ADR/RID:3295 IMDG:3295 IATA:3295

14.2 UN proper shipping name
ADR/RID:HYDROCARBONS, LIQUID, N.O.S.
IMDG:HYDROCARBONS, LIQUID, N.O.S.
IATA:Hydrocarbons, liquid, n.o.s.

14.3 Transport hazard class(es)
ADR/RID:3 IMDG: 3 IATA: 3

14.4 Packaging group
ADR/RID:II IMDG: II IATA: II

14.5 Environmental hazards
ADR/RID: yes Marine pollutant: yes
(Hydrocarbons, C6,
Isoalkanes, <5% n-Hexane

14.6 Special precautions for user
Special Provision 640DSpecial Provision 640DIMDG Code segregation group according chapter 3.1.4.4 : NONE,
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination

packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Directive 2012/18/EC Listed in Regulation : P5c: FLAMMABLE LIQUIDS	**Quantity**: 5.000.000 kg **Quantity**: 50.000.000 kg	
Directive 2012/18/EC Listed in Regulation : E2: Hazardous to the Aquatic Environment	**Quantity**: 200.000 kg **Quantity**: 500.000 kg	
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).

Other inventory information

USA. List of Active Substances on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory, as amended
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Domestic Substances List (DSL), as amended
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
Not in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	:	H225	Highly flammable liquid and vapour.
		H315	Causes skin irritation.
		H336	May cause drowsiness or dizziness.
		H304	May be fatal if swallowed and enters airways.
		H411	Toxic to aquatic life with long lasting effects.
pentane	:	H225	Highly flammable liquid and vapour.
		H304	May be fatal if swallowed and enters airways.
		H336	May cause drowsiness or dizziness.
		H411	Toxic to aquatic life with long lasting effects.
		EUH066	Repeated exposure may cause skin dryness or cracking.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

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