Acetone

31062-4X2.5L

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	:	Acetone
SDS-number	:	000000020241
Type of product	:	Substance
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.
Chemical name	:	acetone; propan-2-one; propanone
Index-No.	:	606-001-00-8

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
Short title of exposure scenarios	:	Laboratory use

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.
Eye irritation Category 2
H319 Causes serious eye irritation.
Specific target organ toxicity - single exposure Category 3 - Central nervous system
H336 May cause drowsiness or dizziness.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Danger

Hazard statements :	H225	Highly flammable liquid and vapour.
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.
	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.
	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P280	Wear protective gloves/ eye protection/ face protection.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical

advice/ attention.

2.3. Other hazards

Vapours may form explosive mixtures with air. 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. 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. Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
acetone; propan-2-one; propanone	67-64-1 606-001-00-8 200-662-2	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	100 %	

3.2. Mixtures

Not applicable

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. Take off all contaminated clothing immediately.

Inhalation:
Remove to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

Skin contact:
After contact with skin, wash immediately with plenty of water. Call a physician if irritation develops or persists.

Eye contact:
Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. Consult a physician.

Ingestion:
When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

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:
Water spray
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

Vapours may form explosive mixtures with air.
Heating will cause pressure rise with risk of bursting and subsequent explosion
In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO2)

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Apply foam in large quantities because some of it will be destroyed by the product.Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

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:
Exhaust ventilation at the object is necessary. Use explosion-proof equipment. Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion:
The heavy vapours can overcome a considerable distance up to the source of ignition. Take measures to prevent the build up of electrostatic charge. Keep away from sources of ignition - No smoking.

Hygiene measures:
Take off all contaminated clothing immediately. Recommended preventive skin protection

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.
Recommended storage temperature: 10 - 25 °C.

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
acetone; propan-2-one; propanone	EH40 WEL STEL	3.620 mg/m3 1.500 ppm		
acetone; propan-2-one; propanone	EH40 WEL TWA	1.210 mg/m3 500 ppm		
acetone; propan-2-one; propanone	EU ELV TWA	1.210 mg/m3 500 ppm		Indicative

EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
STEL - Short term exposure limit
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
acetone; propan-2-one; propanone	Workers / Long-term systemic effects		1210 mg/m3	Inhalation	
acetone; propan-2-one; propanone	Workers / Long-term systemic effects		62mg/kg bw/d	Ingestion	
acetone; propan-2-one; propanone	Workers / Long-term systemic effects		186mg/kg bw/d	Skin contact	
acetone; propan-2-one; propanone	Consumers / Long-term systemic effects		200 mg/m3	Inhalation	

acetone; propan-2-one; propanone	Workers / Acute local effects		2420 mg/m3	Inhalation	
acetone; propan-2-one; propanone	Consumers / Long-term systemic effects		62mg/kg bw/d	Skin contact	

Component	Environmental compartment / Value	Remarks
acetone; propan-2-one; propanone	Fresh water: 10,6 mg/l	
acetone; propan-2-one; propanone	Marine water: 1,06 mg/l	
acetone; propan-2-one; propanone	Fresh water sediment: 30,4 mg/l	
acetone; propan-2-one; propanone	Marine sediment: 3,04 mg/l	
acetone; propan-2-one; propanone	Soil: 29,5 mg/l	
acetone; propan-2-one; propanone	Sewage treatment plant: 100 mg/l	

8.2. Exposure controls

Occupational exposure controls

Do not breathe vapours/dust.
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.

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: butyl-rubber
Break through time: > 480 min
Glove thickness: 0,7 mm
Butoject® 898
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:
Protective suit

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	:	-95 °C
(e) Boiling point/boiling range	:	55 - 57 °C at 1.013 hPa
(g) Lower and upper explosion limit	:	Lower explosion limit 2,2 %(V)
	:	Upper explosion limit 14,3 %(V)

(h) Flash point	:	-17 °C Method: closed cup
(i) Auto-ignition temperature	:	465 °C Method: DIN 51794 not auto-flammable
(j) Decomposition temperature	:	236 °C Decomposition temperature At normal pressure may be distilled without decomposition.
(k) pH	:	Not applicable
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: completely miscible
(n) Partition coefficient: n-octanol/water	:	log Pow -0,24
(o) Vapour pressure	:	ca. 240 hPa at 20 °C 580 hPa at 50 °C
(p) Density and / or relative density	:	0,79 g/cm3 at 20 °C
(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	:	0,32 mPa.s at 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

236 °C
Decomposition temperature
At normal pressure may be distilled without decomposition.

10.3. Possibility of hazardous reactions

Reacts with air to form peroxides.
Vapours may form explosive mixture with air.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Plastic materials can be attacked.
Strong oxidizing agents
Bases
Strong acids
Alkali metals
Alkaline earth metals

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

(a) Acute toxicity

Acute oral toxicity:
LD50
Species: Rat
Value: 5.800 mg/kg

Acute dermal toxicity:
LD50
Species: Rat
Value: > 7.400 mg/kg

Acute inhalation toxicity:
LC50
Species: Rat
Value: 76 mg/l
Exposure time: 4 h

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

(b) Skin corrosion/irritation:
Species: Rabbit
Classification: slightly irritant
Method: Draize Test

(c) Serious eye damage/eye irritation:
Species: Rabbit
Classification: Severe eye irritation

(d) Respiratory or skin sensitisation:
Species: Guinea pig
Classification: non-sensitizing

(e) Germ cell mutagenicity:
Test Method: Chromosome aberration test in vitro
Cell type: Chinese Hamster Ovary Cells
Metabolic activation: with and without metabolic activation
Result: negative

(f) Carcinogenicity:
Species: Mouse
Note: Not classified due to data which are conclusive although insufficient for classification.

(g) Reproductive toxicity:
Species: Rat
Remarks: Not classified due to data which are conclusive although insufficient for classification.

(h) STOT-single exposure:
target organs: Central nervous system
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

(i) STOT - repeated exposure:
Species: Rat, male
Application Route: Oral
Exposure time: 90 d
NOAEL 900 mg/kg
Method: OECD Test Guideline 408
STOT - repeated exposure:
Remarks: No data available

(j) Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
No data available

Other information:
Solvent removes skin oil from the skin.
Inhalation of acetone can cause headaches and a dazed state. Alcohol increases this effect.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
LC50
Species: Pimephales promelas (fathead minnow)
Value: 6.210 mg/l
Exposure time: 96 h

LC50
Species: Leuciscus idus (Golden orfe)
Value: 11.300 mg/l
Exposure time: 48 h

LC50
Species: Gambusia affinis (Mosquito fish)
Value: 13.000 mg/l
Exposure time: 48 h

LC50
Species: Oncorhynchus mykiss (rainbow trout)
Value: 5.540 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to aquatic plants:
EC50
Species: Algae
Value: 3.400 mg/l
Exposure time: 48 h

Toxicity to Microorganisms:
EC50
Species: Bacteria
Value: 1.700 mg/l
Exposure time: 16 h

Toxicity to aquatic invertebrates:
LC50
Species: Daphnia pulex (Water flea)
Value: 8.800 mg/l
Exposure time: 48 h
NOEC
Species: Daphnia magna (Water flea)
Value: 2.212 mg/l
Exposure time: 48 h
Method: OECD Guideline No. 211

12.2. Persistence and degradability

Biodegradability:

Biodegradation: 90 %
Exposure time: 28 d
Result: Readily biodegradable

12.3. Bioaccumulative potential

Bioconcentration factor (BCF): 3
Bioaccumulation is unlikely.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Not very persistent and very bioaccumulative (vPvB).
Not persistent, bioaccumulative, and toxic (PBT).
Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Biochemical Oxygen Demand (BOD)	:	Value: 1.760 mg/g
Chemical Oxygen Demand (COD)	:	Value: 2.070 mg/g

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:1090 IMDG:1090 IATA:1090

14.2 UN proper shipping name

ADR/RID:ACETONE
IMDG:ACETONE
IATA:Acetone

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:no Marine pollutant: no

14.6 Special precautions for user

No data available

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 Number in Regulation: 1.2.5.3	**Quantity**: 5.000.000 kg **Quantity**: 50.000.000 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).

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors		Contains components listed in

VOC:
Directive 2004/42/EC, 100 %

VOC:
Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control), 100 %

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)
On the inventory, or 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

acetone; propan-2-one; propanone	:	H225	Highly flammable liquid and vapour.
		H319	Causes serious eye irritation.
		H336	May cause drowsiness or dizziness.
		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

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. Final determination of suitability of any material is the sole responsibility of the user.
This information should not constitute a guarantee for any specific product properties.

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