according to Regulation (EC) No. 1907/2006, as amended



Acetone

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

1.1. Product identifier

Product name : Acetone

SDS-number 00000020241

Type of product Substance

Remarks SDS according to Art. 31 of Regulation (EC) 1907/2006.

Chemical name : acetone; propan-2-one; propanone

606-001-00-8 Index-No.

REACH Registration

Number

: no data available

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

Use of the : Laboratory chemicals

Substance/Mixture

Uses advised against : none

1.3. Details of the supplier of the safety data sheet

Company Honeywell Specialty Honeywell International, Inc.

> Chemicals Seelze 115 Tabor Road

GmbH Morris Plains, NJ 07950-2546

Wunstorfer Straße 40 USA

30926 Seelze Germany

: (49) 5137-999 0 Telephone

For further information,

please contact:

: SafetyDataSheet@Honeywell.com

1.4. Emergency telephone number

: +1-703-527-3887 (ChemTrec-Transport) Emergency telephone

+1-303-389-1414 (Medical) number

: Poison Control Center:

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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

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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.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS-No. Index-No. REACH Registration Number 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.

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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.

according to Regulation (EC) No. 1907/2006, as amended



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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

according to Regulation (EC) No. 1907/2006, as amended



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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

according to Regulation (EC) No. 1907/2006, as amended



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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	

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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.

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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 recomends 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)

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(h) Flash point : -17 °C

Method: closed cup

(i) Auto-ignition : 465 °C

temperature Method: DIN 51794

not auto-flammable

(j) Decomposition : 236 °C

temperature Decomposition temperature

At normal pressure may be distilled without decomposition.

(k) pH : Not applicable

(I) 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

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

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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

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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:

according to Regulation (EC) No. 1907/2006, as amended



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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

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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:

_C50

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

according to Regulation (EC) No. 1907/2006, as amended



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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

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Biochemical Oxygen : Value: 1.760 mg/g

Demand (BOD)

Chemical Oxygen Demand : Value: 2.070 mg/g

(COD)

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

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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

according to Regulation (EC) No. 1907/2006, as amended



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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.

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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 quidance 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.

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