Acetone

Safety Data Sheet

245682

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Version: 3.0

Date of issue: 13/05/2015 Revision date 02/07/2020

Supersedes 06/03/2017

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

1.1. Product identifier

Product form	: Substance
Substance name	: Acetone
Chemical name	: acetone; propan-2-one; propanone
IUPAC name	: Unnamed
EC Index-No.	: 606-001-00-8
EC-No.	: 200-662-2
CAS-No.	: 67-64-1
Product code	: 245682
Type of product	: Solvents
Formula	: C3H6O
Synonyms	: Propanone
Product group	: Raw material

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

1.2.1. Relevant identified uses

Main use category	: Professional use
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

Supplier

Duchefa Farma BV
A. Hofmanweg 71
2031BH Haarlem - The Netherlands
T +31(0)23-5319093
farma@duchefa.nl - www.duchefa-farma.com

1.4. Emergency telephone number

Emergency number : Supplier contact information:
+31(0)23-5319093 (M-F 09:00-17:00)
+31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	

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
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P210 - Keep away from hot surfaces, open flames, sparks, heat. No smoking.
P305+P351 - IF IN EYES: Rinse cautiously with water for several minutes.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P261 - Avoid breathing vapours, spray.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Other hazards not contributing to the classification : None.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2 (EC Index-No.) 606-001-00-8	<= 100	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	:	Allow affected person to breathe fresh air Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	:	Wash with plenty of water/....
First-aid measures after eye contact	:	Immediately flush eyes thoroughly with water for at least 15 minutes If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth Get medical advice/attention. Risk of aspiration pneumonia.

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

Symptoms/effects	:	Sleepiness. Dizziness Nausea Vomiting Gastrointestinal complaints.
Symptoms/effects after skin contact	:	Cracking of the skin.
Symptoms/effects after eye contact	:	Risk of serious damage to eyes.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	dry chemical powder, alcohol-resistant foam, carbon dioxide (CO_2).
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	:	Vapours may form explosive mixture with air. The vapours are denser than air.
Hazardous decomposition products in case of fire	:	Carbon oxides (CO, CO_2).

5.3. Advice for firefighters

Firefighting instructions : Eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed containers.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray. Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment : Use the personal protective equipment as indicated in chapter 8.

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

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

6.2. Environmental precautions

Dilute with plenty of water. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Ensure adequate ventilation. Dam up the liquid spill.

Methods for cleaning up : Absorb with liquid binding material: Sand, silica,acid binder, saw dust.

6.4. Reference to other sections

Reference to other sections (8, 13).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe vapours. Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Take precautionary measures against static discharge.

Storage conditions : Protect from sunlight.

Incompatible products : Oxidizing agent.

Storage temperature : 15 - 25 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetone (67-64-1)		
EU	Local name	Acetone
EU	IOELV TWA (mg/m³)	1210 mg/m³
EU	IOELV TWA (ppm)	500 ppm

Acetone (67-64-1)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2420 mg/m³
Long-term - systemic effects, dermal	186 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1210 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	62 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	200 mg/m³
Long-term - systemic effects, dermal	62 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	10.6 mg/l
PNEC aqua (marine water)	1.06 mg/l
PNEC aqua (intermittent, freshwater)	21 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	30.4 mg/kg dwt
PNEC sediment (marine water)	3.04 mg/kg dwt
PNEC (Soil)	
PNEC soil	29.5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Technical measures and appropriate working operations should have priority over the use of personal protective equipment.

Materials for protective clothing:

Wear suitable protective clothing

Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN ISO 374

Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Dustmask with filtertype P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 58.08 g/mol
Colour	: Colourless.
Odour	: Characteristic.
Odour threshold	: 0.1 - 662.5 ppm
pH	: No data available
pH solution	: 5 - 6 (C=395 g/l)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -94.8 °C
Freezing point	: No data available
Boiling point	: 56.05 °C
Flash point	: -17 °C
Auto-ignition temperature	: 465 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 233 hPa (20°C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.79 g/cm³
Solubility	: completely miscible with water.
Log Pow	: -0.24
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.32 mPa·s
Explosive properties	: Vapour mixes readily with air, forming explosive mixtures.
Oxidising properties	: No data available.
Explosive limits	: No data available

9.2. Other information

Specific conductivity : 0.01 µS/m

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours may form flammable and explosive mixture with air.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Possibly reacts violently with oxidizing agents, strong reducing agents, strong alkalis.

10.4. Conditions to avoid

High temperature

Air contact

Protect from light.

10.5. Incompatible materials

Fluorine
Strong oxidizing agents
Strong reducing agents
nitric acid
non-metal halides
Halogen-halogen compounds
Hydrogen peroxide
Peroxides
alkali hydroxides
Alkali metals.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg bodyweight Animal: rat, Animal sex: female
LD50 dermal rabbit	200000 mg/kg
LC50 inhalation rat	76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Irritating to eyes.
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

Acetone (67-64-1)	
Viscosity, kinematic	0.405 mm^2/s

SECTION 12: Ecological information

12.1. Toxicity

Acetone (67-64-1)	
LC50 fish 1	5540 mg/l
EC50 Daphnia 1	6100 mg/l
ErC50 (algae)	530 mg/l
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Acetone (67-64-1)	
NOEC (chronic)	>= 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

Acetone (67-64-1)	
Persistence and degradability	readily degradable in water.
Biodegradation	91 % (28 days)

12.3. Bioaccumulative potential

Acetone (67-64-1)	
Log Pow	-0.24
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

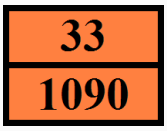
SECTION 14: Transport information

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

ADR	IATA
14.1. UN number	
1090	1090
14.2. UN proper shipping name	
ACETONE	Acetone
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available	

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: F1
Limited quantities (ADR)	: 1l
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
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	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: •2YE

- Air transport

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

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

No REACH Annex XVII restrictions

Acetone is not on the REACH Candidate List

Acetone is not on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

1		Added	change of logo
2.2	Precautionary statements (CLP)	Modified	
4.2	Symptoms/effects	Added	
5.2	Explosion hazard	Added	
5.3	Firefighting instructions	Added	
7.1	Precautions for safe handling	Added	
7.1	Hygiene measures	Added	
8.2	Respiratory protection	Modified	
16	Training advice	Added	

Abbreviations and acronyms:

SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Provide good information, instruction and training for the users.

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
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.

SDS EU (REACH Annex II) duchefa nieuwe logo

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.