

according to Regulation (EC) No. 1907/2006

Creation Date 28-Apr-2009 Revision Date 28-Jul-2022 Revision Number 1

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1. Product identifier

 Product Description:
 Acetone

 Cat No. :
 TS/0116/99SS

 Synonyms
 2-Propanone

 Index No
 606-001-00-8

 CAS No
 67-64-1

 EC No
 200-662-2

 Molecular Formula
 C3 H6 O

REACH registration number 01-2119471330-49

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

Recommended Use Laboratory chemicals.

Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

**Product category** PC21 - Laboratory chemicals

Process categories PROC15 - Use as a laboratory reagent

Uses advised against No Information available

# 1.3. Details of the supplier of the safety data sheet

Company

**EU entity/business name** Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

UK entity/business name

Fisher Scientific UK

Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

**Swiss distributor -** Fisher Scientific AG Neuhofstrasse 11, CH 4153 Reinach

Tel: +41 (0) 56 618 41 11 e-mail - infoch@thermofisher.com

**E-mail address** begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

Tel: 01509 231166

Chemtrec US: (800) 424-9300 Chemtrec EU: 001-703-527-3887

For customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402

Chemtrec Local: +41-43 508 20 11 (Zurich)

# **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

# CLP Classification - Regulation (EC) No 1272/2008

## **Physical hazards**

Flammable liquids Category 2 (H225)

## **Health hazards**

Serious Eye Damage/Eye Irritation Category 2 (H319)
Specific target organ toxicity - (single exposure) Category 3 (H336)

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



Signal Word

Danger

## **Hazard Statements**

H225 - Highly flammable liquid and vapor

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

P280 - Wear eye protection/ face protection

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

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

P312 - Call a POISON CENTER or doctor if you feel unwell

P337 + P313 - If eye irritation persists: Get medical advice/attention

# 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB) This product does not contain any known or suspected endocrine disruptors

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Acetone	67-64-1	200-662-2	>95	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336)
				EUH066

REACH registration number	01-2119471330-49
---------------------------	------------------

Full text of Hazard Statements: see section 16

# **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

**General Advice** If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Self-Protection of the First Aider** Remove all sources of ignition. Use personal protective equipment as required.

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

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting: May cause pulmonary edema

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

**Notes to Physician** Treat symptomatically. Symptoms may be delayed.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

#### Extinguishing media which must not be used for safety reasons

Do not use water jetstream.

Acetone Revision Date 28-Jul-2022

## 5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Formaldehyde, Methanol.

# 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

#### 6.2. Environmental precautions

Should not be released into the environment.

# 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

# **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 7.2. Conditions for safe storage, including any incompatibilities

Flammables area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)

Class 3

Switzerland - Storage of hazardous substances

Storage class - SC 3

https://www.kvu.ch/de/themen/stoffe-und-produkte https://www.kvu.ch/fr/themes/substances-et-produits

https://www.kvu.ch/it/temi/sostanze-e-prodotti

# 7.3. Specific end use(s)

Use in laboratories

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1. Control parameters

## **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Forth edition. Published 2020. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority. **CH** - The Government of Switzerland has set a directive on limit values for working materials (Grenzwerte am Arbeitsplatz) which is based on the Swiss Federal Regulation "Verordnung über die Verhütung von Unfällen und Berufskrankheiten". This directive is administered, periodically revised and enforced by SUVA (Swiss National Accident Insurance Fund).

Component	European Union	The United Kingdom	France	Belgium	Spain
Acetone	TWA: 500 ppm (8h)		TWA / VME: 500 ppm (8 heures). restrictive limit		TWA / VLA-ED: 500
	TWA: 1210 mg/m³ (8h)	TWA: 1210 mg/m³ STEL: 1500 ppm	TWA / VME: 1210	STEL: 492 ppm 15	ppm (8 horas) TWA / VLA-ED: 1210
		STEL: 3620 mg/m <sup>3</sup>	mg/m³ (8 heures). restrictive limit	minuten STEL: 1187 mg/m <sup>3</sup> 15	mg/m³ (8 horas)
			STEL / VLCT: 1000	minuten	
			ppm. restrictive limit STEL / VLCT: 2420		
			mg/m³. restrictive limit		

Component	Italy	Germany	Portugal	The Netherlands	Finland
Acetone	TWA: 500 ppm 8 ore.	TWA: 500 ppm	STEL: 750 ppm 15	STEL: 2420 mg/m <sup>3</sup> 15	TWA: 500 ppm 8
	Time Weighted Average	TWA: 1200 mg/m <sup>3</sup>	minutos	minuten	tunteina
	TWA: 1210 mg/m <sup>3</sup> 8		TWA: 500 ppm 8 horas	TWA: 1210 mg/m <sup>3</sup> 8	TWA: 1200 mg/m <sup>3</sup> 8
	ore. Time Weighted		TWA: 1210 mg/m <sup>3</sup> 8	uren	tunteina
	Average		horas		STEL: 630 ppm 15
					minuutteina
					STEL: 1500 mg/m <sup>3</sup> 15
					minuutteina

Component	Austria	Denmark	Switzerland	Poland	Norway
Acetone	MAK-KZGW: 2000 ppm	TWA: 250 ppm 8 timer	STEL: 1000 ppm 15	STEL: 1800 mg/m <sup>3</sup> 15	TWA: 125 ppm 8 timer
	15 Minuten	TWA: 600 mg/m <sup>3</sup> 8 timer	Minuten	minutach	TWA: 295 mg/m <sup>3</sup> 8 timer
	MAK-KZGW: 4800	STEL: 500 ppm 15	STEL: 2400 mg/m <sup>3</sup> 15	TWA: 600 mg/m <sup>3</sup> 8	STEL: 156.25 ppm 15
	mg/m <sup>3</sup> 15 Minuten	minutter	Minuten	godzinach	minutter. value
	MAK-TMW: 500 ppm 8	STEL: 1200 mg/m <sup>3</sup> 15	TWA: 500 ppm 8		calculated
	Stunden	minutter	Stunden		STEL: 368.75 mg/m <sup>3</sup> 15
	MAK-TMW: 1200 mg/m <sup>3</sup>		TWA: 1200 mg/m <sup>3</sup> 8		minutter. value
	8 Stunden		Stunden		calculated

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Acetone	TWA: 600 mg/m <sup>3</sup>	TWA-GVI: 500 ppm 8	TWA: 500 ppm 8 hr.	Skin-potential for	TWA: 800 mg/m <sup>3</sup> 8
	STEL: 1400 mg/m <sup>3</sup>	satima.	TWA: 1210 mg/m <sup>3</sup> 8 hr.	cutaneous absorption	hodinách.
		TWA-GVI: 1210 mg/m <sup>3</sup>	STEL: 1500 ppm 15 min	TWA: 500 ppm	Ceiling: 1500 mg/m <sup>3</sup>
		8 satima.	STEL: 3630 mg/m <sup>3</sup> 15	TWA: 1210 mg/m <sup>3</sup>	
			min	_	

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Acetone	TWA: 500 ppm 8 tundides. TWA: 1210 mg/m <sup>3</sup> 8 tundides.	TWA: 500 ppm 8 hr TWA: 1210 mg/m <sup>3</sup> 8 hr	STEL: 3560 mg/m <sup>3</sup> TWA: 1780 mg/m <sup>3</sup>	TWA: 1210 mg/m³ 8 órában. AK	TWA: 250 ppm 8 klukkustundum. TWA: 600 mg/m³ 8 klukkustundum. Ceiling: 500 ppm
					Ceiling: 1200 mg/m <sup>3</sup>

Acetone Revision Date 28-Jul-2022

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Acetone	TWA: 500 ppm	TWA: 500 ppm IPRD	TWA: 500 ppm 8	TWA: 500 ppm	TWA: 500 ppm 8 ore
	TWA: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>	Stunden	TWA: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup> 8 ore
		IPRD	TWA: 1210 mg/m <sup>3</sup> 8		
		STEL: 1000 ppm	Stunden		
		STEL: 2420 mg/m <sup>3</sup>			

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Acetone	TWA: 200 mg/m <sup>3</sup> 1763	TWA: 500 ppm	TWA: 500 ppm 8 urah	Indicative STEL: 500	TWA: 500 ppm 8 saat
	MAC: 800 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup> 8	ppm 15 minuter	TWA: 1210 mg/m <sup>3</sup> 8
			urah	Indicative STEL: 1200	saat
			STEL: 2420 mg/m <sup>3</sup> 15	mg/m³ 15 minuter	
			minutah	TLV: 250 ppm 8 timmar.	
			STEL: 1000 ppm 15	NGV	
			minutah	TLV: 600 mg/m <sup>3</sup> 8	
				timmar. NGV	

# **Biological limit values**

List source(s):

Component	European Union	United Kingdom	France	Spain	Germany
Acetone			Acetone: 100 mg/L urine	Acetone: 50 mg/L urine	Acetone: 80 mg/L urine
			end of shift	end of shift	(end of shift)

Component	Italy	Finland	Denmark	Bulgaria	Romania
Acetone				Acetone: 80 mg/L urine	Acetone: 50 mg/L urine
				at the end of exposure	end of shift
				or end of work shift	

Component	Gibraltar	Latvia	Slovak Republic	Luxembourg	Turkey
Acetone			Acetone: 80 mg/L urine		
			end of exposure or work		
			shift		

## **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

# Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Acetone 67-64-1 ( >95 )				DNEL = 186mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Acetone 67-64-1 ( >95 )	DNEL = 2420mg/m <sup>3</sup>			DNEL = 1210mg/m <sup>3</sup>

# **Predicted No Effect Concentration (PNEC)**

See values below.

Acetone Revision Date 28-Jul-2022

Component	Fresh water		Water Intermittent	Microorganisms in	` ' '
		sediment		sewage treatment	
Acetone	PNEC = 10.6mg/L	PNEC = 30.4mg/kg	PNEC = 21mg/L	PNEC = 100mg/L	PNEC = 29.5 mg/kg
67-64-1 (>95)		sediment dw			soil dw

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Acetone	PNEC = 1.06mg/L	PNEC = 3.04mg/kg			
67-64-1 ( >95 )	_	sediment dw			

## 8.2. Exposure controls

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

# Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	> 480 minutes	0.5 mm	EN 374 Level 6	As tested under EN374-3 Determination of
				Resistance to Permeation by Chemicals
Neoprene gloves	< 30 minutes	0.45 mm		

**Skin and body protection** Long sleeved clothing.

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: low boiling organic solvent Type AX Brown conforming to

EN371

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** Do not allow material to contaminate ground water system.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# 9.1. Information on basic physical and chemical properties

Acetone Revision Date 28-Jul-2022

Physical State Liquid

Appearance Colorless
Odor sweet
Odor Threshold 19.8 ppm

Melting Point/Range-95 °C / -139 °FSoftening PointNo data availableBoiling Point/Range56 °C / 132.8 °F

Flammability (liquid) Highly flammable On basis of test data

Flammability (solid,gas) Not applicable Liquid

Explosion Limits Lower 2.1 vol%

Upper 13 vol%

Flash Point -20 °C / -4 °F Method - CC (closed cup)

Autoignition Temperature 465 °C / 869 °F

Decomposition Temperature > 4°C pH 7

Viscosity 0.32 mPa.s @ 20 °C

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Acetone -0.24

Vapor Pressure 247 mbar @ 20 °C

Density / Specific Gravity 0.790

Bulk DensityNot applicableLiquidVapor Density2.0(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Molecular Formula C3 H6 O
Molecular Weight 58.08
VOC Content(%) 100

Explosive Properties Not explosive Vapors may form explosive mixtures with air

Oxidizing Properties Not oxidising

**Evaporation Rate** 5.6 (Butyl Acetate = 1.0)

Refractive index 1.358 - 1.359

# **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot

surfaces and sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents. Strong bases. Peroxides. Halogenated

compounds. Alkali metals. Amines.

## 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Formaldehyde. Methanol.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone	5800 mg/kg (Rat)	> 15800 mg/kg (rabbit)	76 mg/l, 4 h, (rat)
		> 7400 mg/kg (rat)	

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Category 2
Test method OECD 405
Test species rabbit

Observation end point Irritating to eyes

(d) respiratory or skin sensitization;

**Respiratory**Based on available data, the classification criteria are not met **Skin**Based on available data, the classification criteria are not met

Component	Test method	Test species	Study result
Acetone 67-64-1 ( >95 )	Guinea Pig Maximisation Test (GPMT)	guinea pig	non-sensitising

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

Component	Test method	Test species	Study result
Acetone 67-64-1 ( >95 )	OECD Test Guideline 471 AMES test	in vivo	negative
	OECD Test Guideline 476  Mammalian  Gene cell mutation	in vitro	negative

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Category 3

Results / Target organs Central nervous system (CNS).

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Revision Date 28-Jul-2022 Acetone

OECD Test No. 408 Test method **Test species / Duration** Rat / 90 days NOAEL = 900 mg/kgStudy result

Oral Route of exposure

**Target Organs** None known.

(j) aspiration hazard; Based on available data, the classification criteria are not met

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

May cause pulmonary edema.

#### 11.2. Information on other hazards

**Endocrine Disrupting Properties** 

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

# **SECTION 12: ECOLOGICAL INFORMATION**

# 12.1. Toxicity **Ecotoxicity effects**

Component	Freshwater Fish	Water Flea	Freshwater Algae
Acetone	Oncorhynchus mykiss: LC50 =	EC50 = 8800 mg/L/48h	NOEC = 430 mg/l (algae; 96 h)
	5540 mg/l 96h	EC50 = 12700 mg/L/48h	
	Alburnus alburnus: LC50 =	EC50 = 12600 mg/L/48h	
	11000 mg/l 96h		
	Leuciscus idus: LC50 = 11300		
	mg/L/48h		
	Salmo gairdneri: LC50 = 6100		
	mg/L/24h		

Component	Microtox	M-Factor
Acetone	EC50 = 14500 mg/L/15 min	

#### 12.2. Persistence and degradability Readily biodegradable

Persistence is unlikely based on information available Persistence

1 01313101100	r crosseried is drillicity, based or	information available:
	Component	Degradability
	Acetone	91 % (28 d) (OECD 301 B)
	67-64-1 ( >95 )	

#### Bioaccumulation is unlikely 12.3. Bioaccumulative potential

Component	log Pow	Bioconcentration factor (BCF)
Acetone	-0.24	0.69 dimensionless

#### The product contains volatile organic compounds (VOC) which will evaporate easily from all 12.4. Mobility in soil

surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in

## 12.5. Results of PBT and vPvB

<u>assessment</u>

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent

and very bioaccumulative (vPvB).

## 12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** 

This product does not contain any known or suspected endocrine disruptors

Revision Date 28-Jul-2022 Acetone

12.7. Other adverse effects **Persistent Organic Pollutant** 

This product does not contain any known or suspected substance **Ozone Depletion Potential** This product does not contain any known or suspected substance

# **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** 

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

**European Waste Catalogue (EWC)** 

According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations.

Switzerland - Waste Ordinance

Disposal should be in accordance with applicable regional, national and local laws and regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

# **SECTION 14: TRANSPORT INFORMATION**

# IMDG/IMO

UN1090 14.1. UN number ACETONE 14.2. UN proper shipping name 14.3. Transport hazard class(es)

14.4. Packing group

II

## **ADR**

14.1. UN number UN1090 14.2. UN proper shipping name **ACETONE** 

14.3. Transport hazard class(es) П 14.4. Packing group

#### IATA

UN1090 14.1. UN number ACETONE 14.2. UN proper shipping name 3

14.3. Transport hazard class(es) 14.4. Packing group П

No hazards identified 14.5. Environmental hazards

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

# SECTION 15: REGULATORY INFORMATION

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

# **International Inventories**

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Acetone	67-64-1	200-662-2	-	-	Х	X	KE-29367	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Acetone	67-64-1	Х	ACTIVE	X	-	X	X	X

Legend: X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

# Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		Candidate List of Substances of Very High
Acetone	67-64-1	-	Use restricted. See item 75. (see link for restriction details)	Concern (SVHC)

## **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

## Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	
-		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report	
		Notification	Requirements	
Acetone	67-64-1	Not applicable	Not applicable	

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

#### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

\_\_\_\_\_

Revision Date 28-Jul-2022 Acetone

**WGK Classification** See table for values

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Acetone	WGK1	

Component	France - INRS (Tables of occupational diseases)
Acetone	Tableaux des maladies professionnelles (TMP) - RG 84

# **Swiss Regulations**

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Acetone 67-64-1 ( >95 )		Group I	

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

# **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

EUH066 - Repeated exposure may cause skin dryness or cracking

#### Legend

**CAS** - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Substances List

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate VOC - (volatile organic compound)

Acetone Revision Date 28-Jul-2022

## **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Creation Date28-Apr-2009Revision Date28-Jul-2022Revision SummaryNot applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No. 1907/2006

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2, Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

#### Disclaimer

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

**End of Safety Data Sheet**