

SAFETY DATA SHEET

Creation Date 28-Apr-2009 Revision Date 25-Apr-2019 Revision Number 7

1. Identification

Product Name Acetone

Cat No.: AC177170000; AC177170010; AC177170025; AC177170050;

AC177170100; AC177170250

CAS-No 67-64-1 Synonyms 2-Propanone

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Serious Eye Damage/Eye Irritation

Category 2

Specific target organ toxicity (single exposure)

Category 3

Target Organs - Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Kidney, Liver, spleen, Blood.

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor Causes serious eye irritation

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May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Get medical attention/advice if you feel unwell

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Acetone	67-64-1	>95

4. First-aid measures

General Advice If symptoms persist, call a physician.

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

medical attention.

Acetone

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

call a physician.

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

symptoms occur.

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

Most important symptoms and

effects

None reasonably foreseeable. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause pulmonary edema: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting

Treat symptomatically **Notes to Physician**

5. Fire-fighting measures

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed **Suitable Extinguishing Media**

containers exposed to fire with water spray.

Unsuitable Extinguishing Media Water may be ineffective

-20 °C / -4 °F **Flash Point**

Method -Closed cup

465 °C / 869 °F **Autoignition Temperature**

Explosion Limits

Upper 12.8 vol % Lower 2.5 vol % **Oxidizing Properties** Not oxidising

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

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

Llaalth

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

Protective Equipment and Precautions for Firefighters

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

NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

Accidental release measures

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of **Personal Precautions**

ignition. Take precautionary measures against static discharges.

Environmental Precautions Should not be released into the environment.

Clammability

Methods for Containment and Clean 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. Up

7. Handling and storage

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Ensure Handling

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.

Storage Flammables area. Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep away from heat and sources of ignition.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Acetone	TWA: 250 ppm	(Vacated) TWA: 750 ppm	IDLH: 2500 ppm	TWA: 500 ppm
	STEL: 500 ppm	(Vacated) TWA: 1800 mg/m ³	TWA: 250 ppm	STEL: 750 ppm
		(Vacated) STEL: 2400	TWA: 590 mg/m ³	
		mg/m³		
		(Vacated) STEL: 1000 ppm		
		TWA: 1000 ppm		
		TWA: 2400 mg/m ³		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

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.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Long sleeved clothing.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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

9. Physical and chemical properties

Physical StateLiquidAppearanceColorlessOdorsweetOdor Threshold19.8 ppmpH7

Melting Point/Range -95 °C / -139 °F
Boiling Point/Range 56 °C / 132.8 °F
Flash Point -20 °C / -4 °F
Method - Closed cup

Evaporation Rate 5.6 (Butyl Acetate = 1.0)

Flammability (solid,gas) Not applicable

Flammability or explosive limits

 Upper
 12.8 vol %

 Lower
 2.5 vol %

Vapor Pressure 247 mbar @ 20 °C

Acetone

Vapor Density 2.0 0.790 **Specific Gravity**

Solubility Soluble in water Partition coefficient; n-octanol/water No data available **Autoignition Temperature** 465 °C / 869 °F

> 4°C **Decomposition Temperature**

Viscosity 0.32 mPa.s @ 20 °C

Molecular Formula C3 H6 O **Molecular Weight** 58.08 Refractive index 1.358 - 1.359

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stable under normal conditions. Stability

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

surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong reducing agents, Strong bases, Peroxides, Halogenated

compounds, Alkali metals, Amines

Hazardous Decomposition Products Carbon monoxide (CO₂), Formaldehyde, Methanol

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

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)			

Toxicologically Synergistic Carbon tetrachloride; Chloroform; Trichloroethylene; Bromodichloromethane; Dibromochloromethane; N-nitrosodimethylamine; 1,1,2-Trichloroethane; Styrene; **Products**

Acetonitrile, 2,5-Hexanedione; Ethanol; 1,2-Dichlorobenzene

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Acetone	67-64-1	Not listed				

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

Teratogenicity No information available.

Central nervous system (CNS) STOT - single exposure STOT - repeated exposure Kidney Liver spleen Blood

Aspiration hazard No information available

delayed

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

May cause pulmonary edema: Inhalation of high vapor concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Acetone	NOEC = 430 mg/l (algae; 96	Oncorhynchus mykiss: LC50	EC50 = 14500 mg/L/15 min	EC50 = 8800 mg/L/48h
	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		

Persistence is unlikely based on information available. Persistence and Degradability

Bioaccumulation/ Accumulation No information available.

Will likely be mobile in the environment due to its volatility. **Mobility**

Component	log Pow
Acetone	-0.24

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Acetone - 67-64-1	U002	•

14. Transport information

DOT

UN-No UN1090 **ACETONE Proper Shipping Name**

Hazard Class 3 Ш **Packing Group**

TDG

UN-No UN1090

Proper Shipping Name ACETONE

Hazard Class Packing Group Ш

IATA

UN1090 **UN-No Proper Shipping Name ACETONE**

Hazard Class 3 Ш **Packing Group**

IMDG/IMO

UN-No UN1090

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Acetone

Proper Shipping Name ACETONE

Hazard Class 3
Packing Group ||

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Acetone	67-64-1	Χ	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Ε	Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Г	Acetone	67-64-1	X	-	200-662-2	X	X	Х	Х	KE-29367

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous

substance under the Comprehensive Environmental Response Compensation and Liability

Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Acetone	5000 lb	-

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know

Regulations

Component	Component Massachusetts		Pennsylvania	Illinois	Rhode Island
Acetone	X	Х	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

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Mexico - Grade Serious risk, Grade 3

16. Other information

Prepared By Regulatory Affairs

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

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 SDS