

Safety Data Sheet

according to Regulations (EC) No. 1907/2006, No. (EU) 2015/830

Name : PURE ACETONE
Code: 0001
Revision date : 15/01/2018
Print date : 15/01/2018
REVISION 8

SECTION 1: Identification of the substance/mixture and of the company/ undertaking**1.1 Product identifier**

ACETONE ; CAS No. : 67-64-1 ; EC No. : 200-662-2 ; INDEX No. : 606-001-00-8 ; REACH registration No. : 01-2119471330-49 PURE ACETONE
Cod.: 0001

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

Distribution of substance
Formulation & (re)packing of substances and mixtures
Polymer processing Industrial use - Professional use
Use in Cleaning Agents Industrial use - Professional use - Consumer use
Use in laboratories Industrial use - Professional use
Use in de-icing and anti-icing applications Professional use - Consumer use
Use in oil and gas field drilling and production operations Industrial use - Professional use
Explosives manufacture & use
Use as processing aid
Uses in coatings Industrial use - Professional use - Consumer use
Use as binders and release agents Industrial use - Professional use
Rubber production and processing
Polymer production Industrial use - Professional use
Use as blowing agents
Use in agrochemicals

Uses advised against

This product is not recommended for any industrial, professional or consumer use other than identified in table on the front page of the annex.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

BRENNA SRL
VIA ARNO48
20831 SEREGNO (MB) ITALY
Tel. +39 0362 239819

Information contact : brennachim@gmail.com

1.4 Emergency telephone number

24 h / 7 d

Centro Antiveleni di Milano +39 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano)
Centro Antiveleni di Pavia +39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)
Centro Antiveleni di Bergamo +39 800 883300 (CAV Ospedali Riuniti - Bergamo)
Centro Antiveleni di Firenze +39 055 7947819 (CAV Ospedale Careggi - Firenze)
Centro Antiveleni di Roma +39 06 3054343 (CAV Policlinico Gemelli - Roma)
Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni di Napoli +39 081 7472870 (CAV Ospedale Cardarelli - Napoli)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]

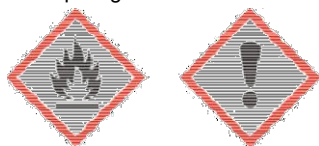
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
Flam. Liq. 2 ; H225 - Flammable liquids : Category 2 ; Highly flammable liquid and vapour.

STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Flame (GHS02) F Exclamation mark (GHS07)

Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243 Take precautionary measures against static discharge.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : ACETONE

INDEX No. : 606-001-00-8

EC No. : 200-662-2

REACH No. : 01-2119471330-49

CAS No. : 67-64-1

Purity : 100 % [mass]

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention.

Following inhalation

Remove from the danger zone, move to a ventilated place; if symptoms of malaise appear seek medical assistance.

In case of skin contact

Flush away with water and rinse. Change clothes if necessary. If irritation persists or tissue damage occurs, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Do not induce vomiting if not authorized by a physician, show the MSDS. Never give anything by mouth to an unconscious person. If swallowed practice the gastric lavage. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Irritates the airways: for high doses nausea, headache, confusion, dizziness, stupor to coma with miosis areagente.

Irritating action to eyes: may cause corneal injury.

Irritating action on the skin: for prolonged contact dermatitis can be determined.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

The product is flammable, pay close attention. The product is not explosive, but formation of explosive vapour/air mixtures is possible. Avoid formation of vapours.

5.1 Extinguishing media**Suitable extinguishing media**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

In case of fire can be released: carbon dioxide, carbon monoxide

5.3 Advice for firefighters

In case of fire do not breathe fumes When extinguishing fires, use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protection gloves, clothes, glasses, boots and respiratory apparatus. Refer to protective measures listed in sections 7 and 8.

For emergency responders

Keep away from heat and sparks.

6.2 Environmental precautions

If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Quickly collect the product wearing mask and protective clothing. Limit and adsorb the spill with inert adsorbing material (for example sand, vermiculite). Put the resultant material in adequate packaging and send to an authorized plant for the disposal.

Collect the spread product, and then wash with water area and materials. Recove the water used and send to an authorized plant for the disposal.

6.4 Reference to other sections

SECTION 8: Exposure controls/personal protection SECTION 13: Disposal considerations

SECTION 7: Handling and storage



For transportation, storage and handling use only proper materials.

7.1 Precautions for safe handling

Use with good manufacturing practice and with correct protection devices Avoid the contact and vapours and/or dust inhalation. See the MSDS paragraph 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Avoid temperatures above 50 °C. 5 - Heating may cause an explosion. Store in a cool, dry place. Avoid exposure to direct sunlight. Keep away from fire, sparks and ignition sources Make sure that ventilation is adequate.

Hints on joint storage

Keep away from materials which can lead to reaction. See par. 10.

Storage class : 3

7.3 Specific end use(s)

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

Occupational exposure limit values

ACETONE ; CAS No. : 67-64-1

Limit value type (country of origin) : TWA (EC)

Limit value : 500 ppm / 1210 mg/m³

Version : 08/06/2000

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL Consumer (systemic) (ACETONE ; CAS No. : 67-64-1)

Exposure route : Oral

Exposure frequency : Long-term (repeated)

Limit value : 62 mg/kg

Limit value type : DNEL Consumer (systemic) (ACETONE ; CAS No. : 67-64-1)

Exposure route : Dermal

Exposure frequency : Long-term (repeated)

Limit value : 62 mg/kg

Limit value type : DNEL Consumer (systemic) (ACETONE ; CAS No. : 67-64-1)

Exposure route : Inhalation

Exposure frequency : Long-term (repeated)

Limit value : 200 mg/m³

Limit value type : DNEL worker (systemic) (ACETONE ; CAS No. : 67-64-1)

Exposure route : Dermal

Exposure frequency : Long-term (repeated)

Limit value : 186 mg/kg

Limit value type : DNEL worker (systemic) (ACETONE ; CAS No. : 67-64-1)

Exposure route : Inhalation

Exposure frequency : Short-term (acute)

Limit value :	2420 mg/m ³
Limit value type :	DNEL worker (systemic) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	1210 mg/m ³
PNEC	
Limit value type :	PNEC aquatic, freshwater (ACETONE ; CAS No. : 67-64-1)
Limit value :	10,6 mg/l
Limit value type :	PNEC aquatic, intermittent release (ACETONE ; CAS No. : 67-64-1)
Limit value :	21 mg/l
Limit value type :	PNEC aquatic, marine water (ACETONE ; CAS No. : 67-64-1)
Limit value :	1,06 mg/l
Limit value type :	PNEC sediment, freshwater (ACETONE ; CAS No. : 67-64-1)
Limit value :	30,4 mg/kg
Limit value type :	PNEC sediment, marine water (ACETONE ; CAS No. : 67-64-1)
Limit value :	3,04 mg/kg
Limit value type :	PNEC soil (ACETONE ; CAS No. : 67-64-1)
Limit value :	33,3 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) (ACETONE ; CAS No. : 67-64-1)
Limit value :	100 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection



Safety glasses with side shields (EN 166).

Skin protection

Hand protection

DIN EN 374 Gloves butyl rubber 0.7 mm, breakthrough time > 480 min

Respiratory protection

Suitable respiratory protection apparatus

In case of insufficient ventilation, wear suitable respiratory equipment. Mask with specific cartridge (organic vapours)

Recommended Filter type: AX.

General health and safety measures

Do not eat or drink during work - no smoking. Use hand, eyes and respiratory apparatus protection devices. The protection devices supplier must ensure those devices are suitable for the product managing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Safety relevant basis data

Aspect			liquid
Colour			colourless
Odour			aromatico
Melting point/melting range :	(1013 hPa)	=	-94,7 °C
Vapour density	((air = 1))	=	2,1
Initial boiling point and boiling range :	(1013 hPa)	=	56 °C

Decomposition temperature :			No data available
Self flammability			No data available
Flash point :	=		-18 °C
Ignition temperature :	=		465 °C
Flammability (solid, gas)			Data not available
Lower explosion limit :	=		2,5 Vol-%
Upper explosion limit :	=		14,3 Vol-%
Explosive properties			Product is not explosive
Vapour pressure :	(50 °C)	=	814 hPa
Vapour pressure	(20 °C)	=	240 hPa
Density :	(20 °C)	approx.	0,79 g/cm ³
Water solubility :	(20 °C)		miscibility
pH :			5 - 6
pKa		=	24,2
Octanol-water partition coefficient (log Pow):		=	-0,2
Log Pow	(20 °C)		not applicable
Viscosity :	(20 °C)	=	0,32 mPa.s
Odour threshold			Data not available
Odour threshold:		=	48 mg/m ³
Evaporation rate			Data not available
Maximum VOC content (EC) :			100 Wt %
Refraction index	(20 °C)		1,358 - 1,359
Oxidizing properties			Data not available

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts with bases.

10.2 Chemical stability

Stable under recommended storage and handling conditions(See section 7).

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Flammable Keep away from fire, sparks and ignition sources Vapours are heavier than air, spread along floors and form explosive mixtures with air.

10.5 Incompatible materials

Oxidizing agents. Alkalis. Amines

10.6 Hazardous decomposition products

In case of fire can be released: carbon dioxide, carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

no negative effect

Acute oral toxicity

Parameter : LD50 (ACETONE ; CAS No. : 67-64-1)

Exposure route :	Oral
Species :	Rat
Effective dose :	= 5800 mg/kg
Acute dermal toxicity	
Parameter :	LD50 (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 20 ml/kg
Acute inhalation toxicity	
Parameter :	LC50 (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Inhalation
Species :	Rat (female)
Effective dose :	76 mg/l
Exposure time :	4 h

Irritant and corrosive effects

On the eye: Irritating. Repeated or prolonged contact with skin may cause dermatitis or dieback.

Sensitisation

No known sensitizing effect.

Repeated dose toxicity (subacute, subchronic, chronic)

May cause drowsiness or dizziness.

Subacute oral toxicity

Parameter :	NOAEL(C) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Oral
Species :	Male
Effective dose :	= 20000 ppm

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Not known to be mutagenic, carcinogenic or toxic for reproduction.

Reproductive toxicity**Developmental toxicity/teratogenicity****One generation reproduction toxicity test**

Parameter :	NOAEL(C) (ACETONE ; CAS No. : 67-64-1)
Exposure route :	Male
Effective dose :	= 4858 mg/kg bw/day

STOT-single exposure

No specific target organ toxicity observed.

Aspiration hazard

Not applicable.

SECTION 12: Ecological information

Use with good manufacturing practice. Avoid the release in the environment

VOC: Yes

12.1 Toxicity**Aquatic toxicity****Acute (short-term) fish toxicity**

Parameter :	LC50 (ACETONE ; CAS No. : 67-64-1)
Species :	Pimephales promelas
Effective dose :	= 8120 mg/l
Exposure time :	96 h

Acute (short-term) daphnia toxicity

Parameter :	EC50 (ACETONE ; CAS No. : 67-64-1)
Species :	Daphnia
Effective dose :	= 8800 mg/l
Exposure time :	48 h

Acute (short-term) algae toxicity

Parameter :	EC50 (ACETONE ; CAS No. : 67-64-1)
Species :	Algae
Effective dose :	= 530 mg/l
Exposure time :	8 days

12.2 Persistence and degradability

Biodegradation

Readily biodegradable

12.3 Bioaccumulative potential

Shortly bioaccumulative

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This product is none, or does not contain a substance called a PBT or vPvB.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Waste treatment options

Appropriate disposal / Package

Give to an incinerator or in an approved landfill in accordance with local regulations.

Contaminated packaging: Collect all residues and contaminated packaging. After an appropriate cleaning, packaging can be reused. The packages to be disposed of are to be considered as the material itself.

SECTION 14: Transport information

14.1 UN number

UN 1090

14.2 UN proper shipping name

Land transport (ADR/RID)

ACETONE (ACETONE)

Sea transport (IMDG)

ACETONE (ACETONE)

Air transport (ICAO-TI / IATA-DGR)

ACETONE (ACETONE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 3

Classification code :	F1
Hazard identification number (Kemler No.) :	33
Tunnel restriction code :	D/E
Special provisions :	LQ 11 F E 2
Hazard label(s) :	3
Sea transport (IMDG)	
Class(es) :	3
EmS-No. :	F-E / S-D
Special provisions :	LQ 11 F E 2
Hazard label(s) :	3
Air transport (ICAO-TI / IATA-DGR)	
Class(es) :	3
Special provisions :	E 2
Hazard label(s) :	3

14.4 Packing group

II

14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

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

Not applicable.

SECTION 15: Regulatory information

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

EU legislation

Reg. 830/2015/UE (Amending Regulation (EC) no. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Directive 67/548/CEE (Dangerous substances classification, labelling and packaging) and subsequent amendments.

Directive 1999/45/CE (Dangerous preparations classification, labelling and packaging) and subsequent amendments.

15.1 Regulation n°. 1907/2006/CE (REACH).

Regulation n°. 1272/2008/CE (CLP).

Regulation n°. 790/2009/CE (amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008)

Regulation EU 286/2011 (amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008)

Regulation EU 618/2012 (amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008).

Regulation EU 487/2013 (amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008).

Authorisations and/or restrictions on use

Substance subjected to restriction in accordance with the Annex XVII of Regulation (CE) 1907/2006. (restriction num. 3)

Other regulations (EU)

Regulation (CE) 1907/2006: Substance of very high concern (SVHC) included in the Candidate List

None

National regulations

Italy: Legislative Decree 81/2008 (Consolidated Law on protection of health and safety at work), as amended and Directive 2009/161/UE - chemical risk assessment in accordance with Title IX Scheduled substances listed in Category 3 of the annex I of Commission Regulation (EC) No 1232/2002 measures to be taken to discourage the diversion of certain substances to the illicit manufacture of narcotic drugs and psychotropic substances and amendments. Italy: Product subject to legislative decree June 26, 2015 No 105 and Directive 2012/18/EU.

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Other regulations, restrictions and prohibition regulations

Betriebssicherheitsverordnung (BetrSichV)

No flammable liquid according to BetrSichV.

15.2 Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

16.1 Indication of changes

Firefighting measures Accidental release measures Handling and storage Exposure controls/personal protection Stability and reactivity Toxicological information Transport information Other information

16.2 Abbreviations and acronyms

LEGENDA:

ADR:	Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)
ASTM:	ASTM International, originariamente nota come American Society for Testing and Materials (ASTM)
EINECS:	European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)
EC(0/50/100):	Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50/100% degli Individui)
LC(0/50/100):	Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50/100% degli Individui)
IC50:	Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui)
NOEL:	No Observed Effect Level (Dose massima senza effetti)
NOEC:	No Observed Effect Concentration (Concentrazione massima senza effetti)
LOEC:	Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto)
DNEL:	Derived No Effect Level (Dose derivata di non effetto)
DMEL:	Derived Minimum Effect Level (Dose derivata di minimo effetto)
CLP:	Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)
CSR:	Rapporto sulla Sicurezza Chimica (Chemical Safety Report)
LD(0/50/100):	Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui)
IATA:	International Air Transport Association (Associazione Internazionale del Trasporto Aereo)
ICAO:	International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)
Codice IMDG:	International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)
PBT:	Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)
RID:	Règlement concernent le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose)
STEL:	Short term exposure limit (limite di esposizione a breve termine)
TLV:	Threshold limit value (soglia di valore limite)
TWA:	Time Weighted Average (media ponderata nel tempo)
UE:	Unione Europea
vPvB:	Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)
N.D.:	Non disponibile.

N.A.:	Non applicabile
VwVwS.:	Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVwS)
PNEC:	Predicted No Effect Concentration
PNOS:	Particulates not Otherwise Specified
BOD:	Biochemical Oxygen Demand
COD:	Chemical Oxygen Demand
BCF:	BioConcentration Factor
TRGS :	Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany
LCLo:	Lethal Concentration Low (La minima concentrazione letale)
ThOD:	Theoretical Oxygen Demand

16.3 Key literature references and sources for data None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.4 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

16.5 Training advice

None

16.6 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
