

SAFETY DATA SHEET

ACETONE

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

1.1. Product identifier

Product name	ACETONE
Product number	586
Synonyms; trade names	DIMETHYL KETONE, 2- PROPANONE, PROPAN-2-ONE, ACETONE MIN 99.5%, ACETONE PH, ACETONE HIGH PURITY, MX-THINNERS HTS 10208, ACETONE HP, MX-THINNER HTS 10268, ACETONE INDUSTRIAL, ACETONE PHARMA GRADE, ACETONE – HÖGANÄS, ACETONE PHARMA – INV. LACKADE, ACETONE PHARMA, ACETONE NF, ACETONE EP, ACETONE GLD, ACETONE STATOIL, ACETONE LOW BENZENE SSL, ACETONE ELB, ACETONE CZ, ACETONE T, ACETONE RECTAPUR
REACH registration number	01-2119471330-49-XXXX
CAS number	67-64-1
EU index number	606-001-00-8
EC number	200-662-2

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

Identified uses	Lab Reagent Industrial Solvent Production of Rubber Oilfields Surface coating Chemical Intermediate Polymers Process Additive Monomer Binder Release Agent Formulation Resin. Cosmetics For further information, see attached Exposure Scenario.
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1.3. Details of the supplier of the safety data sheet

Supplier	Darrant Distribution LTD Unit 1 Witham Point Wavell Drive Lincoln LN3 4PL +44 1522 533244 sales@darrantch emicals.com
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1.4. Emergency telephone number

Emergency telephone	01522 533244
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H336
Environmental hazards	Not Classified

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2.2. Label elements

EC number 200-662-2

Pictogram



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.
 P261 Avoid breathing vapour/ spray.
 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.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name ACETONE

REACH registration number 01-2119471330-49-XXXX

EU index number 606-001-00-8

CAS number 67-64-1

EC number 200-662-2

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Keep the affected person warm and at rest. Get prompt medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

Inhalation Drowsiness, dizziness, disorientation, vertigo. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Central nervous system depression.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor Treat according to symptoms: No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is flammable. Heating may generate flammable vapours. Oxides of the following substances: Carbon. Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Provide adequate ventilation. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. No smoking, sparks, flames or other sources of ignition near spillage. Stop leak if possible without risk.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Provide adequate ventilation. Vapours may accumulate on the floor and in low-lying areas. Keep away from heat, sparks and open flame. Avoid the formation of mists. Eliminate all sources of ignition. Static electricity and formation of sparks must be prevented. Protect against direct sunlight. Mechanical ventilation or local exhaust ventilation may be required. Use explosion proof electric equipment. Take action to prevent static discharges. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from flammable and combustible materials. Earth container and transfer equipment to eliminate sparks from static electricity. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Suitable container materials: Stainless steel. Polyethylene-lined mild steel. Glass.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DNEL Industry - Dermal; Long term : 186 mg/kg/day
 Industry - Inhalation; Short term : 2420 mg/m³
 Industry - Inhalation; Long term : 1210 mg/m³
 Consumer - Oral; Long term : 62 mg/kg/day
 Consumer - Dermal; Long term : 62 mg/kg/day
 Consumer - Inhalation; Long term : 200 mg/m³

PNEC - Fresh water; 10.6 mg/l
 - Marine water; 1.06 mg/l
 - water; 21 mg/l
 - Sediment; 3.04 mg/kg
 - Soil; 33.3 mg/l
 - STP; 29.5 mg/l

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Personal protection

Wear anti-static footwear

Eye/face protection

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Butyl rubber. glove thickness 0.5mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear rubber apron. Wear rubber footwear.

Hygiene measures

Provide eyewash station. Wash hands after handling. Avoid contact with eyes.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX. EN 136/140/141/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	47.5
pH	pH (diluted solution): 5-6 50
Melting point	-94.7°C
Initial boiling point and range	55.8 - 56.6°C
Flash point	-17°C Closed cup.
Evaporation rate	0.5 (diethyl ether = 1)
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 14.3 % Lower flammable/explosive limit: 2.5 %
Other flammability	No information available.
Vapour pressure	24.1 kPa
Vapour density	2
Relative density	0.79 @ 20°C
Bulk density	0.79 kg/l

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Solubility(ies)	Soluble in water.
Partition coefficient	: -0.24
Auto-ignition temperature	465°C
Decomposition Temperature	No information available.
Viscosity	0.32 mPa s @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	1.358 - 1.359
Particle size	No information available.
Molecular weight	58.09
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 790 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Forms explosive mixtures with air. Avoid the following conditions: Chlorinated hydrocarbons.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Amines. Strong reducing agents. Alkalis - inorganic. Alkalis - organic.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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**Acute toxicity oral (LD₅₀
mg/kg)** 5,800.0

Species Rat

Notes (oral LD₅₀) OECD 401

Acute toxicity - dermal

**Acute toxicity dermal (LD₅₀
mg/kg)** 15,800.0

Species Rat

Acute toxicity - inhalation

**Acute toxicity inhalation (LC₅₀
vapours mg/l)** 76.0

Species Rat

ATE inhalation (vapours mg/l) 76.0

Skin corrosion/irritation

Skin corrosion/irritation May cause skin irritation.

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation

Drowsiness, dizziness, disorientation, vertigo. Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

Ingestion

May cause nausea, headache, dizziness and intoxication. Gastrointestinal symptoms, including upset stomach. Central nervous system depression.

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Skin contact	Irritating to skin. Repeated exposure may cause skin dryness or cracking.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)
LC50, 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 8800 mg/l, Daphnia magna

Acute toxicity - microorganisms , : 1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 28 days: 2.212 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Biodegradation Water - Degradation (%) 91: 28 days
The substance is readily biodegradable.

Chemical oxygen demand 2.21 g O₂/g substance

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating. BCF: 3,

Partition coefficient : -0.24

12.4. Mobility in soil

Mobility The product is soluble in water.

Adsorption/desorption coefficient Water - : 1.5 @ 20°C

Henry's law constant 3311 Pa m³/mol @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids. Waste is classified as hazardous waste.

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Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID)	1090
UN No. (IMDG)	1090
UN No. (ICAO)	1090
UN No. (ADN)	1090

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ACETONE
Proper shipping name (IMDG)	ACETONE
Proper shipping name (ICAO)	ACETONE
Proper shipping name (ADN)	ACETONE

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2

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Emergency Action Code •2YE

Hazard Identification Number 33
(ADR/RID)

Tunnel restriction code (D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

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 (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

This product may impact SEVESO storage regulations.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 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.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

ECHA Disseminated REACH Dossier

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

27/03/2018

Version number

3.000

Supersedes date

14/03/2017

SDS number

586

ACETONE

SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Signature	Jitendra Panchal