

**ACETONE**

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 - United Kingdom (UK).

Version: 01

Revision: 26.10.2015
(Previous revision 13.11.2012)

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

1.1 Product Identifier;

Product Name Acetone
Product Code: 0118
Product Synonyms: 2-Propanone

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

Product use Professional use only. Industrial applications
Use of the Substance/mixture Solvent/Cleaning/degreasing.

1.3 Details of the supplier of the safety data sheet;

Churchill Paints Ltd
Riverdane Road, Eaton Bank Trading Estate,
Congleton, Cheshire, CW12 1PN
Tel. +44(0)1260 290666, Fax. +44(0)1260 290 444

e-mail address of person responsible for this SDS
sales@churchill-paints.co.uk

1.4 Emergency Telephone Number:

+44(0) 1260 290 666 (office hours only)

2. SECTION 2: Hazards identification;

2.1 Classification of the substance or mixture;

Product definition Substance

Classification In accordance with the Classification, Labelling and Packaging Regulation (EC) No 1272/2008

Physical hazards Flam. Liq. 2, H225

Health hazards Eye Irrit. 2A, H319

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STOT SE 3, H336
EUH066

**Environmental
hazards**

Not Classified

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word

Danger

Hazard statements

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.

Precautionary Statements

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed
P243 Take precautionary measures against static discharge.
P261 - Avoid breathing mist, spray, vapours

Response

P303+361+353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313 - IF exposed or concerned: Get medical advice/attention.

Storage

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

Disposal

Not applicable

**Hazardous
Ingredients**

Not applicable

**Supplemental
label elements**

Not applicable

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*Annex XVII –
Restrictions on the
manufacture, placing
on the market and
use of certain
dangerous substances,
mixtures and
articles.*

Not applicable

2.3. *Other hazards* **PBT:** This product is not identified as a PBT/vPvB substance.

3. **SECTION 3: Composition/information on ingredients**

3.1 *Substances* Substance

<i>REACH Registration Number</i>	<i>Chemical name</i>	<i>% by wt.</i>	<i>CAS No.</i>	<i>EC No. (EINEC S)</i>	<i>Index No.</i>	<i>Classification Regulation (EC) No.1272/2008 [CLP]</i>
01-2119471330-49	ACETONE	100	67-64-1	200-662-2	606-001-00-8	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336, EUH066

The Full Text for all Hazard Statements on this SDS is displayed in Section 16.

4. **SECTION 4: First aid measures**

4.1. *Description of first aid measures*

<i>Eye contact</i>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
<i>Inhalation</i>	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention immediately.
<i>Skin contact</i>	Remove contaminated clothing immediately and wash skin with soap and water.
<i>Ingestion</i>	If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

**ACETONE*****Protection of first-aiders***

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2. *Most important symptoms and effects, both acute and delayed****Eye contact***

There may be irritation and pain.

Inhalation

There may be irritation of the throat with a feeling of tightness in the chest. There may be a feeling of tightness in the chest with shortness of breath.

Skin contact

There may be redness or whiteness of the skin in the area of exposure. An itchy rash may occur at the site of contact.

Ingestion

Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting.

Delayed / immediate effects

There may be drowsiness, slurred speech, muscular weakness, muscle twitching, tremor, blurred vision, dilated pupils and shock. There may be vomiting and diarrhoea.

4.3. *Indication of any immediate medical attention and special treatment needed****Notes to physician***

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate / special treatment:

Eye bathing equipment should be available on the premises.

5. SECTION 5: Firefighting measures
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5.1. *Extinguishing media****Suitable extinguishing media***

Carbon dioxide. Dry chemical powder. Alcohol resistant foam.

Unsuitable extinguishing media

Do not use water jet.

**ACETONE****5.2. Special hazards arising from the substance or mixture****Hazards from the Mixture**

Highly flammable. Vapour may travel considerable distance to source of ignition and flash back. Forms explosive air-vapour mixture.

Hazardous combustion products

Decomposition products may include the following materials:

Carbon dioxide
Carbon monoxide

5.3. Advice for firefighters**Protective actions during firefighting**

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire-exposed containers cool and disperse vapours. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. SECTION 6: Accidental release measures
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6.1. Personal precautions, protective equipment and emergency procedures**For non-emergency Personnel**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Isolate leaks providing there is no additional risk to those performing this task. Personal protection equipment must be used to avoid direct contact with the spillage. Shut off all ignition sources. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

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Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3. Methods and material for containment and cleaning up***Small spill***

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1. Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**ACETONE****7.2. Conditions for safe storage, including any incompatibilities****Storage precautions**

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Not available.

8. SECTION 8: Exposure Controls/personal protection
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The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1. Control parameters

<i>Occupational exposure limits to be monitored in the work environment</i>					
<i>Ingredient name:</i>	<i>Comment (from EH40)</i>	<i>Time-weighted average – 8 hrs (TWA).</i>		<i>Short-term exposure limits – 15min (STELs)</i>	
		<i>ppm.</i>	<i>mg/m³</i>	<i>ppm.</i>	<i>mg/m³</i>
Acetone		500	1210	1500	3620

Comments are from HSE Guidance Note EH40/2005 Workplace exposure limits (WELs)

DNELs (Workers)

<i>Ingredient name:</i>	<i>Exposure</i>	<i>Short term</i>		<i>Long term</i>	
		<i>Systemic</i>	<i>Local</i>	<i>Systemic</i>	<i>Local</i>
Acetone	<i>Oral</i>	No data available	No data available	No data available	No data available
	<i>Dermal</i>	No data available	No data available	186mg/kg bw/d	No data available
	<i>Inhalation</i>	2420 mg/m³	No data available	1210 mg/m³	No data available

**ACETONE***DNELs (General Population)*

<i>Ingredient name:</i>	<i>Exposure</i>	<i>Short term</i>		<i>Long term</i>	
		<i>Systemic</i>	<i>Local</i>	<i>Systemic</i>	<i>Local</i>
Acetone	<i>Oral</i>	No data available	No data available	62mg/kg bw/d	No data available
	<i>Dermal</i>	No data available	No data available	62mg/kg bw/d	No data available
	<i>Inhalation</i>	No data available	No data available	200 mg/m ³	No data available

PNEC

<i>Ingredient name:</i>	<i>Environmental sphere</i>	<i>PNEC value</i>
Acetone	<i>Fresh water</i>	10.6 mg/l
	<i>Marine water</i>	1.06 mg/l
	<i>Fresh water sediment</i>	30.4 mg/kg
	<i>Marine water sediment</i>	3.04 mg/kg
	<i>Sewage Treatment</i>	100 mg/l
	<i>Soil</i>	33.3 mg/kg

8.2 Exposure controls:*Appropriate engineering controls*

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.3 Individual protection measures, such as personal protective equipment (PPE)*Hygiene measures*

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

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Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

**Skin protection**

For hands, chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture that can provide information about the breakthrough time of the glove material.

For body, Personal protective equipment should be selected based on the task being performed and the risks involved.

For feet, appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.



Protective gloves



Overall



Safety boots

Respiratory Protection

Self-contained breathing apparatus must be available in case of emergency. Use air-fed respirator. Gas/vapour filter, type A: organic vapours (EN141).

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance**Physical State**

Liquid

Colour

Colourless

Odour

Characteristic

Odour threshold

Not available

pH

Not available

Melting point

Not available

**ACETONE**

<i>Freezing point</i>	-94 °C
<i>Initial boiling point</i>	56 °C
<i>Boiling range</i>	Not available
<i>Flash point</i>	-16.99 °C - closed cup
<i>Evaporation rate</i>	Not available
<i>Flammability (solid, gas)</i>	Not available
<i>Upper/lower Flammability or Explosive limits</i>	Upper explosion limit: 13 % (V) Lower explosion limit: 2 % (V)
<i>Vapour pressure</i>	533.3 hPa at 39.5 °C 245.3 hPa at 20.0 °C
<i>Vapour density</i>	Not available
<i>Relative density</i>	0.791 g/mL at 25 °C
<i>Solubility(ies)</i>	completely miscible
<i>Partition coefficient n-octanol/water</i>	log Pow: -0.24
<i>Auto-ignition temperature</i>	465.0 °C
<i>Decomposition temperature</i>	Not available
<i>Viscosity</i>	Not available
<i>Explosive properties</i>	Not available
<i>Oxidising properties</i>	Not available

10. SECTION 10: Stability and reactivity

10.1 Reactivity:

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability:

This product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

In a fire, hazardous decomposition products may be produced.

10.5 Incompatible materials

Keep away from: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

Decomposition products may include the following materials: carbon monoxide, carbon dioxide and smoke.

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11. SECTION 11: Toxicological information
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11.1. Information on toxicological effects

<i>Ingredient name:</i>	<i>Acute toxicity test</i>	<i>Species</i>	<i>Dose</i>	<i>Exposure</i>
Acetone	<i>Oral – LD₅₀</i>	Rat	5800 mg/kg bw	
	<i>Dermal – LD₅₀</i>	Guinea Pig	7426 mg/kg bw	
	<i>Inhalation – LC₅₀</i>	Rat	50100 mg/m ³	8 hrs

Skin corrosion/irritation

Skin - Rabbit
Result: Mild skin irritation - 24 h

Serious eye damage/irritation

Eyes - Rabbit
Result: Eye irritation - 24 h

Respiratory or skin sensitization

Guinea pig
Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

Reproductive toxicity

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Specific target organ toxicity - single exposure

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met, however, it does contain substances classified as dangerous with repeated exposure. For more information see section 3.

Aspiration hazard

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**ACETONE****12. SECTION 12: Ecological Information****12.1. Toxicity**

<i>Ingredient name:</i>	<i>Acute toxicity test</i>	<i>Genus - Species</i>	<i>Dose</i>	<i>Exposure</i>
Acetone	<i>LC₅₀</i>	Fish - <i>Oncorhynchus mykiss</i> (Rainbow Trout)	5540 mg/L	96 hrs
	<i>LC₅₀</i>	Crustacean - <i>Daphnia magna</i> (Water flea)	8800 mg/L	48 hrs

12.2. Persistence and degradability

<i>Ingredient name:</i>	<i>Concentration</i>	<i>Duration of test</i>	<i>% Biodegradability</i>
Acetone	7.8 - 15.6 µg/L	28 days	90.9

12.3. Bioaccumulative potential

<i>Ingredient name:</i>	<i>BCF</i>	<i>Log P_{ow}</i>	<i>Potential</i>
Acetone	3	No data available	Very low

12.4. Mobility in soil

<i>Ingredient name:</i>	<i>K_{oc}</i>	<i>HLC</i> (Henry's law constant)	<i>Surface tension</i>
Acetone	No data available	No data available	No data available

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

No data available

**ACETONE****13. SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Disposal methods The generation of waste should be avoided or minimised wherever possible. Disposal of this product, should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

European waste catalogue (EWC)

<i>Waste code</i>	<i>Description</i>
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances.

Packaging

<i>Waste code</i>	<i>Description</i>
15 01 04	Metallic cans

14. SECTION 14: Transport information

		<i>Land</i>	<i>Inland Waterways</i>	<i>Sea</i>	<i>Air</i>
		<i>ADR/RID</i>	<i>ADN</i>	<i>IMDG</i>	<i>ICAO</i>
14.1.	<i>UN number</i>	UN1090	UN1090	UN1090	UN1090
14.2.	<i>UN proper shipping name</i>	ACETONE	ACETONE	ACETONE	ACETONE
	<i>Transport.hazard.class(es)</i>	3	3	3	3
	<i>Packing group</i>	II	II	II	II
14.3.	<i>Environmental hazards Marine pollutant</i>	No	No	No	No
14.4.	<i>Special precautions for user</i>				
14.5.	<i>Tunnel restriction code</i>	D/E			

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14.6	<i>Transport category</i>				
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15. SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorisation.

Not listed in Annex XIV.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Not applicable.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

16. SECTION 16: Other information
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This safety data sheet conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830.

**Abbreviations
and Acronyms**

DNEL	-	Derived No Effect Level
PNEC	-	Predicted No Effect Concentration
EUH statement	-	CLP-specific Hazard statement
ADR	-	European agreement concerning the international carriage of dangerous goods by road.
IMDG	-	International maritime dangerous goods code.
IATA	-	International Air Transport Association.
ICAO	-	International Civil Aviation Organisation.
BCF	-	Bio Concentration Factor
LD ₅₀	-	Lethal Dose 50
EC ₅₀	-	Effective Concentration 50
Log P _{ow}	-	Octanol-water partition coefficient
K _{oc}	-	Partition coefficient of organic carbon

**Full Text of
Physical Hazards**

H225 - Highly flammable liquid and vapour.

**ACETONE***Full Text of
Health Hazards*

H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
STOT SE - Specific target organ toxicity - single exposure
EUH066 - Repeated exposure may cause skin dryness or cracking.

*Full Text of
Environmental
Hazards*

Not Classified

Disclaimer

The information contained in this safety data sheet is based on the state of knowledge and national legislation at the time of the 'revision date' shown on page 1. Further updates to this safety data sheet, in line with changes to legislation and technical knowledge, will be available from Churchill Paints or the Churchill website. Contact Churchill Paints for the latest revision. This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. It is the user's responsibility to ascertain the suitability of the product for a specific use. As the specific conditions-of-use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.
