

Section 1 - Identification of Chemical Product and Company

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Trade Name: **Illume Pure**
Other Name(s): 2-Propanone; Dimethylketone; Dimethylketal.
Proper Shipping Name: ACETONE
Product Use: Industrial solvent and chemical intermediate.
Creation Date: March, 2017

Section 2 - Hazards Identification

Hazardclassification Of Mixture

- Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; **DANGEROUS GOODS**.
- This material is hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE**.

SUSMP Schedule: S5 CAUTION

Poison Schedule Hazard Category:

- Category 2: Flammable liquids
- Category 2A: Eye Irritation
- Category 3: Specific target organ toxicity (single exposure)

Pictograms



Hazard Statements

Signal Word: DANGER

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

Precautionary Statements

PREVENTION

- P210** Keep away from heat / sparks / open flames / hot surfaces. No smoking.
- P233** Keep container tightly closed.
- P240** Ground / bond container and receiving equipment.
- P241** Use explosion-proof electrical / ventilating / lighting equipment.
- P242** Use only non-sparking tools.
- P243** Take precautionary measures against static discharge.
- P261** Avoid breathing mist / vapours / spray.
- P264** Wash hands thoroughly after handling.
- P271** Use only outdoors or in a well-ventilated area.
- P280** Wear protective gloves / protective clothing / eye protection / face protection.

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RESPONSE

P303+P361+P353 IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire:

Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

P305+P351+P338 IF IN EYES:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

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

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

STORAGE

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

P405 Store locked up.

DISPOSAL

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

OTHER HAZARDS

AUH066 Repeated exposure may cause skin dryness or cracking.

Section 3 - Composition/Information on Ingredients

Chemical identity of ingredients	CAS Number(s) for ingredients	Proportion of ingredients	Hazard Codes
Acetone	67-64-1	100%	H225 H319 H336

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is **13 11 26** from anywhere in Australia (**0800 764 766** in New Zealand) and is available at all times. Have this MSDS with you when you call.

Immediate Medical Attention And Special Treatment

TREAT SYMPTOMATICALLY.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

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Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Section 5 - Fire - Fighting Measures

5.1 Suitable Extinguishing Media:

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray or water fog can be used.

5.2 Specific Hazards arising from the Substance or Mixture:

Highly flammable liquid. May form flammable vapour mixtures with air. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. Vapour may travel a considerable distance to source of ignition and flash back.

5.4 Recommendations for Fire Fighting Personnel:

On burning will emit toxic fumes. Keep containers cool with water spray. If safe to do so, remove containers from path of fire. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

5.5 Hazchem or Emergency action code: 2YE

Section 6 - Accidental Release Measures

6.1 Emergency Procedures / Environmental Precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

6.2 Personal Precautions / Protective Equipment:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours.

6.3 Methods And Materials For Containment And Cleaning Up:

Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material).

Section 7 - Handling and Storage

This material is a **Scheduled Poison S5** and must be stored, maintained and used in accordance with the relevant regulations.

7.1 Precautions For Safe Handling:

Keep out of reach of children. Avoid skin and eye contact and breathing in vapour.

7.2 Conditions of Safe Storage, including any Incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or

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ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

Section 8 - Exposure Controls / Personal Protection

8.1 Control Parameters

8hr TWA = 1185 mg/m³ (500 ppm), 15 min STEL = 2375 mg/m³ (1000 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

8.2 Biological Exposure Indices

Biological Exposure Index (Acetone): Acetone in urine = 50 mg/L (end of shift)

8.3 Engineering Controls

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

8.4 Individual protection measures, such as Personal Protective Equipment (PPE)

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

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Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties:

- Physical state: Clear Liquid
- Colour: Colourless
- Odour: Characteristic , Sweet
- Solubility: Miscible in water.
- Specific Gravity: 0.791 @20°C
- Relative Vapour Density (air=1): 2.0
- Vapour Pressure (20 °C): 180 mm Hg
- Flash Point (°C): -17 (CC)
- Flammability Limits (%): 2.15-13
- Autoignition Temperature (°C): 465
- Boiling Point/Range (°C): 56
- pH: Not available
- Viscosity: 0.303 cPs @25°C
- Evaporation Rate: 6 (n-Butyl acetate = 1)

Section 10 - Stability And Reactivity

Chemical Reactivity: No information available.

Chemical Stability: Stable under normal conditions of use.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Avoid exposure to heat, sources of ignition, and open flame.

Incompatible Materials: Incompatible with strong oxidising agents, strong alkalis, bromine, and mineral acids.

Hazardous Decomposition Products: Oxides of carbon.

Section 11 - Toxicological Information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

a) Ingestion:

Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

b) Eye Contact: An eye irritant.

c) Skin Contact: Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

d) Inhalation: Material may be irritant to the mucous membranes of the respiratory tract (airways). Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

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e) Acute toxicity: No LD50 data available for the product.

For Acetone :

Oral LD50: 5800-8400 mg/kg

Dermal LD50: 20000 mg/kg

Inhalation LC50: 32000 ppm/4 hr

f) Skin corrosion/irritation: Slight irritant.

g) Serious eye damage/irritation: Moderate irritant.

h) Chronic effects: A study of 800 workers occupationally exposed to acetone vapours (600-2150 ppm) over an 18 vyear period revealed no significant adverse effects in exposed compared with unexposed workers.

Section 12 - Ecological Information

ECOTOXICITY: Avoid contaminating waterways.

Section 13 - Disposal Considerations

DISPOSAL METHODS AND CONTAINERS

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for incineration by an approved agent.

Section 14 - Transport Information

14.1 ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; **DANGEROUS GOODS.**

UN NUMBER:	1090
UN PROPER SHIPPING NAME:	ACETONE
CLASS AND SUBSIDIARY RISK:	3 Flammable Liquid
HAZCHEM CODE:	2YE
PACKING GROUP:	II



14.2 MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; **DANGEROUS GOODS.**

UN NUMBER:	1090
UN PROPER SHIPPING NAME:	ACETONE
CLASS:	3 Flammable Liquid
PACKING GROUP:	II
IMDG EMS FIRE:	F-E
IMDG EMS SPILL:	S-D

14.3 AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; **DANGEROUS GOODS.**

UN NUMBER:	1090
UN PROPER SHIPPING NAME:	ACETONE
CLASS:	3 Flammable Liquid
PACKING GROUP:	II

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Section 15 - Regulatory Information

CLASSIFICATION

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

- Category 2: Flammable liquids
Category 2A: Eye Irritation
Category 3: Specific target organ toxicity (single exposure)

HAZARD STATEMENT(S)

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

Poisons Schedule (SUSMP): S5 Caution

This material is listed on the Australian Inventory of Chemical Substances (AICS).

Section 16 - Other Information

EMERGENCIES ONLY CONTACT

000 (Australia)

POISONS INFORMATION CENTRE

13 11 26 (Australia)

0800 764 766 (New Zealand)

- Date of preparation / Last revision of the SDS 7 March, 2017
- Print Date 7 March, 2017
- Prepared by SDS Manager

Key/legend to abbreviations and acronyms used in the SDS

ADG	Australian Code for the Transport of Dangerous Goods by Road and Rail
ACGIH	American Conference of Governmental Industrial Hygienists
ASCC	Australian Safety and Compensation Council
ATE	Acute Toxicity Estimates
BEI®	Biological exposure indices (BEI) are values used for guidance to assess biological monitoring results. With respect to chemical exposure, biological monitoring is the measurement of the concentration of a chemical marker in a human biological media that indicates exposure. They are not developed for use as legal standards.
Carcinogen Category Number:	<ol style="list-style-type: none">1. Established human carcinogen2. Probably human carcinogen3. Substances suspected of having carcinogenic potential
Code AICS	Australian Inventory of Chemical Substances
CAS number	Chemical Abstracts Service Registry Number
EPG	Emergency Procedure Guide (superseded by IERG)
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HCIS	The Hazardous Chemical Information System (HCIS) is a database of information on chemicals that have been classified in accordance with the Globally Harmonized System of Classification

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and Labelling of Chemicals (GHS).

HCIS replaces the previous Hazardous Substance Information System (HSIS).

HSIS is a database of information on substances classified in accordance with Australia's previous hazardous substance classification system, the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)].

IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IERG	HB 76-2004 Dangerous goods - Initial Emergency Response Guide
IMDG	International Maritime Dangerous Goods. A uniform code for transport of dangerous goods at sea.
LEL	Lower Flammable (Explosive) Limits in air;
LD50	Lethal Dose sufficient to kill 50% of test population
NIOSH	National Institute for Occupational Safety and Health The United States federal agency responsible for conducting research and making recommendations for the prevention of workrelated injury and illness.
NOAEL	No Observed Adverse Effect Level
NOEL	No Observable Effect Level
NOHSC	National Occupational Health and Safety Commission
NTP	National Toxicology Program (USA)
PEL	Permissible Exposure Limit
RTECS	Registry of Toxic Effects of Chemical Substances (Symyx Technologies')
TCLO	Toxic Concentration Low
TDLO	Toxic Dose Low : lowest dosage per unit of bodyweight (typically stated in milligrams per kilogram) of a substance known to have produced signs of toxicity in a particular animal species.
TLV Threshold Limit Value (ACGIH):	The time weighted average used to describe exposure which is harmless to most of the population when exposed 8 hours per day, 40 hours per week.
TWA (Time Weighted Average):	The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
SAFework	Independent statutory agency with primary responsibility to improve occupational health and safety and workers' compensation arrangements across Australia.
STEL (Short Term Exposure Limit):	The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UEL	Upper Flammable (Explosive) Limits in air;
UN Number	United Nations Number
VOC Volatile Organic Content - defined as:	"Any chemical compound based on carbon chains or rings with a vapour pressure greater than 0.1mm of mercury (Hg) or 0.0135Kpa at 25°C. This definition excludes reactive diluents, which are designed to be chemically bound into the cured film. It also includes all constituents >0.5% by volume of formulation, which are organic compounds with a boiling point < 250°C".

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Literature References

SOURCES FOR DATA

Safety Data Sheets from Suppliers

Hazardous Chemical Information System (HCIS) - ASCC Australia (on-line)

GHS (Globally Harmonised System of Substance Classification & Labelling)

REACH (European Chemical Substance Information System)

ADG Code Ed 7.4

SUSMP N° 16

DISCLAIMER

This SDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Hawley Manicure. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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