Auto Klene Solutions

Safety Data Sheet according to WHS and ADG requirements

Print Date: 23/03/2016

Initial Date: Not Available

Chemwatch Hazard Alert Code: 4

S.GHS.AUS.EN

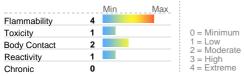
SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier	
Product name	Auto Klene Total Release (multiple fragrances) Odour Eliminator
Synonyms	Not Available
Proper shipping name	AEROSOLS
Other means of identification	Not Available
Relevant identified uses of the	ne substance or mixture and uses advised against
Relevant identified uses	Application is by spray atomisation from a hand held aerosol pack Use according to manufacturer's directions. Odour eliminator.
Details of the supplier of the	safety data sheet
Registered company name	Auto Klene Solutions
Address	1/83 Merrindale Drive VIC Croydon 3136 Australia
Telephone	+61 3 8761 1900
Fax	+61 3 8761 1955
Website	https://www.autoklene.com/msds/
Email	Not Available
Emergency telephone number	er
Association / Organisation	Not Available
Emergency telephone numbers	131 126 (Poisons Information Centre)
Other emergency telephone numbers	0408 406 968 (Mark Adams mobile)
SECTION 2 HAZARDS ID	ENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS



Poisons Schedule	Not Applicable
[1] Classification	Aerosols Category 1, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (narcotic effects)
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label



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SIGNAL WORD DANGER Hazard statement(s) H222 Extremely flammable aerosol. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. AUH044 Risk of explosion if heated under confinement AUH066 Repeated exposure may cause skin dryness and cracking Precautionary statement(s) Prevention P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: Do not pierce or burn, even after use. P271 Use only outdoors or in a well-ventilated area. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. Precautionary statement(s) Response P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Precautionary statement(s) Storage P405 Store locked up. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P403+P233 Store in a well-ventilated place. Keep container tightly closed. Precautionary statement(s) Disposal P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name			
67-64-1	<75	acetone			
57-55-6	<20	propylene glycol			
68476-85-7.	<20	hydrocarbon propellant			

SECTION 4 FIRST AID MEASURES

Description of first aid measu	ures
Eye Contact	If aerosols come in contact with the eyes: ▶ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If solids or aerosol mists are deposited upon the skin: Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.

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If aerosols, fumes or combustion products are inhaled:

Remove to fresh air.

- Lay patient down. Keep warm and rested.
- ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- ▶ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- ▶ Transport to hospital, or doctor.

Ingestion

Inhalation

Not considered a normal route of entry.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

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To treat poisoning by the higher aliphatic alcohols (up to C7):

- ▶ Gastric lavage with copious amounts of water.
- ▶ It may be beneficial to instill 60 ml of mineral oil into the stomach. ▶

Oxygen and artificial respiration as needed.

- ▶ Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- ▶ To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.

BASIC TREATMENT

----- Establish a

patent airway with suction where necessary.

- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- ▶ Monitor and treat, where necessary, for shock.
- ▶ Monitor and treat, where necessary, for pulmonary oedema.
- Anticipate and treat, where necessary, for seizures
- ▶ DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

ADVANCED TREATMENT

- ▶ Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred. ▶ Positive-pressure ventilation using a bag-valve mask might be of use. ▶ Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ▶ If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- ▶ Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications. ▶ Drug therapy should be considered for pulmonary oedema. ▶ Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- ▶ Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome. ▶ Acidosis may respond to hyperventilation and bicarbonate therapy.
- ▶ Haemodialysis might be considered in patients with severe intoxication.
- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For C8 alcohols and above.

Symptomatic and supportive therapy is advised in managing patients.

For acute or short term repeated exposures to acetone:

- ▶ Symptoms of acetone exposure approximate ethanol intoxication.
- About 20% is expired by the lungs and the rest is metabolised. Alveolar air half-life is about 4 hours following two hour inhalation at levels near the Exposure Standard; in overdose, saturable metabolism and limited clearance, prolong the elimination half-life to 25-30 hours.
- ▶ There are no known antidotes and treatment should involve the usual methods of decontamination followed by

supportive care. [Ellenhorn and Barceloux: Medical Toxicology] Management:

Measurement of serum and urine acetone concentrations may be useful to monitor the severity of ingestion or inhalation. Inhalation Management:

- ▶ Maintain a clear airway, give humidified oxygen and ventilate if necessary.
- ▶ If respiratory irritation occurs, assess respiratory function and, if necessary, perform chest X-rays to check for chemical pneumonitis. ▶ Consider the use of steroids to reduce the inflammatory response. ▶ Treat pulmonary oedema with PEEP or CPAP ventilation. Dermal Management:
 - Remove any remaining contaminated clothing, place in double sealed, clear bags, label and store in secure area away from patients and staff. Irrigate with copious amounts of water.
 - An emollient may be required.

Eye Management:

- Irrigate thoroughly with running water or saline for 15 minutes.
- ▶ Stain with fluorescein and refer to an ophthalmologist if there is any uptake of the stain.

Oral Management:

No GASTRIC LAVAGE OR EMETIC

▶ Encourage oral fluids.

Systemic Management:

- ▶ Monitor blood glucose and arterial pH.
- ▶ Ventilate if respiratory depression occurs
- If patient unconscious, monitor renal function.
- ▶ Symptomatic and supportive care.

The Chemical Incident Management Handbook:

Guy's and St. Thomas' Hospital Trust, 2000

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BIOLOGICAL EXPOSURE INDEX

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant Sampling Time Comments Index 50 mg/L Acetone in urine End of shift NS

NS: Non-specific determinant; also observed after exposure to other material

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

SMALL FIRE:

▶ Water spray, dry chemical or CO2

LARGE FIRE:

▶ Water spray or fog.

Special hazards arising from the substrate or mixture

-p				
Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result			
Advice for firefighters				
Fire Fighting	 ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ If safe, switch off electrical equipment until vapour fire hazard removed. ▶ Use water delivered as a fine spray to control fire and cool adjacent area. ▶ DO NOT approach containers suspected to be hot. 			
Fire/Explosion Hazard	 ▶ Liquid and vapour are highly flammable. ▶ Severe fire hazard when exposed to heat or flame. ▶ Vapour forms an explosive mixture with air. ▶ Severe explosion hazard, in the form of vapour, when exposed to flame or spark. ▶ Vapour may travel a considerable distance to source of ignition. ▶ Heating may cause expansion or decomposition with violent container rupture. ▶ Aerosol cans may explode on exposure to naked flames. 			

Combustion products include:, carbon dioxide (CO2), other pyrolysis products typical of burning organic material **SECTION 6 ACCIDENTAL RELEASE MEASURES**

Personal precautions, protect	tive equipment and emergency procedures
Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. ▶ Shut off all possible sources of ignition and increase ventilation. ▶ Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated.	
Major Spills	Undamaged cans should be gathered and stowed safely. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses ▶ No smoking, naked lights or ignition sources. ▶ Increase ventilation. Stop leak if safe to do so.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	
	 ► Avoid all personal contact, including inhalation. ► Wear protective clothing when risk of exposure occurs. ► Use in a well-ventilated area.
Safe handling	▶ Prevent concentration in hollows and sumps.
	▶ DO NOT enter confined spaces until atmosphere has been checked.
	▶ Avoid smoking, naked lights or ignition sources.
	▶ Avoid contact with incompatible materials.

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▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can • Store in original containers in approved flammable liquid storage area.

▶ DO NOT store in pits, depressions, basements or areas where vapours may be

trapped. ▶ No smoking, naked lights, heat or ignition sources. ▶ Keep containers securely sealed. Contents under pressure.

- ▶ Store away from incompatible materials.
- ▶ Store in a cool, dry, well ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container

Other information

- Aerosol dispenser.
- ▶ Check that containers are clearly labelled.

Storage incompatibility

- ▶ Avoid reaction with oxidising agents
- ▶ Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Material name

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	acetone	Acetone	1185 mg/m3 / 500 ppm	2375 mg/m3 / 1000 ppm	Not Available	Not Available
Australia Exposure Standards	propylene glycol	Propane-1,2-diol total: (vapour & particulates) / Propane-1,2-diol: particulates only	474 mg/m3 / 10 mg/m3 / 150 ppm	Not Available	Not Available	Not Available
Australia Exposure Standards	hydrocarbon propellant	LPG (liquified petroleum gas)	1800 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient

acetone	Acetone Not Available		Not Available	Not Available	
propylene glycol	Propylene glycol; (1,2-Propanediol) 30 mg/m3		1300 mg/m3	7900 mg/m3	
hydrocarbon propellant	Liquified petroleum gas; (L.P.G.) 3,000 ppm		3200 ppm	19000 ppm	
Ingredient	Original IDLH		Revised IDLH		
acetone	20,000 ppm		2,500 [LEL] ppm		
propylene glycol	Not Available	Not Available			
hydrocarbon propellant	19,000 [LEL] ppm	2,000 [LEL] p	pm		
	-				

Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

TEEL-1

TEEL-2

TEEL-3

Appropriate engineering controls

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

Personal protection











Eye and face protection

No special equipment for minor exposure i.e. when handling small quantities.

OTHERWISE: For potentially moderate or heavy exposures:

- ▶ Safety glasses with side shields.
- ▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.

Skin protection

See Hand protection below

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▶ No special equipment needed when handling small quantities. ▶ OTHERWISE: ▶ For potentially moderate exposures: ▶ Wear general protective gloves, eg. light weight rubber gloves. Hands/feet ▶ For potentially heavy exposures: protection \blacktriangleright Wear chemical protective gloves, eg. PVC. and safety footwear. NOTE: ▶ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. ▶ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. **Body protection** See Other protection below No special equipment needed when handling small quantities. OTHERWISE: Overalls. Other protection ▶ Skin cleansing cream. ▶ Eyewash unit. ▶ Do not spray on hot surfaces. Thermal hazards Not Available

Recommended material(s)

Respiratory protection

GLOVE SELECTION INDEX Type AX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI

Material	СРІ
BUTYL	С
BUTYL/NEOPRENE	С
CPE	С
HYPALON	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	AX-AUS / Class 1 P2	-	AX-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	AX-2 P2	AX-PAPR-2 P2
up to 50 x ES	-	AX-3 P2	-
50+ x ES	-	Air-line**	-

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the

The effect(s) of the following substance(s) are taken into account in the computer-

generated selection:

"Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection

Auto Klene Total Release (multiple fragrances) varies with Type of filter.

* - Continuous-flow; ** - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

PVDC/PE/PVDC	С
SARANEX-23	С

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SARANEX-23 2-PLY	С
TEFLON	С
VITON/NEOPRENE	С
##propylene	glycol

^{*} CPI - Chemwatch Performance Index

NOTE: As a series of factors will influence the actual performance of the glove, a final

selection must be based on detailed observation. -

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Aerosol with a characteristic odour.		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n- octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Jpper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
ower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 ▶ Elevated temperatures. ▶ Presence of open flame. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

^{*} Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

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SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological	effects
Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. WARNING:Intentional misuse by concentrating/inhaling contents may be lethal.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments
	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
Skin Contact	Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Еуе	Not considered to be a risk because of the extreme volatility of the gas. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration
Chronic	Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Principal route of occupational exposure to the gas is by inhalation. Workers exposed to acetone for long periods showed inflammation of the airways, stomach and small bowel, attacks of giddiness and loss of strength. Exposure to acetone may enhance the liver toxicity of chlorinated solvents.

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TOXICITY

Not Available

TOXICITY

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IRRITATION

Not Available

IRRITATION

acetone	Dermal (rabbit) LD50: 20000 mg/kg ^[2]	Eye (human): 500 ppm	n - irritant
	Inhalation (rat) LC50: 50.1 mg/L/8 hr ^[2]	Eye (rabbit): 20mg/24h	nr -moderate
	Oral (rat) LD50: 5800 mg/kgE ^[2]	Eye (rabbit): 3.95 mg -	SEVERE
	oral (rai) EBOO. GOOD Highige	Skin (rabbit): 500 mg/2	
		Skin (rabbit):395mg (c	
		, , ,	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 100 mg -	
propylene glycol	Oral (rat) LD50: 20000 mg/kgd ^[2]	Eye (rabbit): 500 mg/2	
		Skin(human):104 mg/3	
		Skin(human):500 mg/7	uays miiu
	TOXICITY	IRRITATION	
	Inhalation (mouse) LC50: >15.6-<17.9 mm/l2 h mm/l2="">[1]	Not Available	
	Inhalation (mouse) LC50: >15.6-<17.9 mm/l2 h mm/l2="">[1]		
	Inhalation (mouse) LC50: 410000 ppm2 h ^[1]		
	Inhalation (mouse) LC50: 410000 ppm2 h ^[1]		
	Inhalation (rat) LC50: >800000 ppm15 min ^[1]		
	Inhalation (rat) LC50: >800000 ppm15 min ^[1]		
hydrocarbon propellant	Inhalation (rat) LC50: 1354.944 mg/L15 min ^[1]		
	Inhalation (rat) LC50: 1355 mg/l15 min ^[1]		
	Inhalation (rat) LC50: 1442.738 mg/L15 min ^[1]		
	Inhalation (rat) LC50: 1442.738 mg/L15 min ^[1]		
	Inhalation (rat) LC50: 1443 mg/l15 min ¹		
	Inhalation (rat) LC50: 1443 mg/l15 min ^[1]		
	Inhalation (rat) LC50: 570000 ppm15 min ^[1]		
Legend:	Value obtained from Europe ECHA Registered Substances - Acute to	-	anufacturer's SDS. Unless otherwise specified data
	extracted from RTECS - Register of Toxic Effect of chemical Substance		
	•		
ACETONE	The material may cause skin irritation after prolonged or repeated exvesicles, scaling and thickening of the skin. for acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or setoxicity of acetone has been examined in mice and rats that were as Acetone-induced increases in relative kidney weight changes were observed increases in the relative liver weight in male and female rats that we associated with microsomal enzyme induction. Haematologic effects consistent with the spleen.	ensitiser but is a defatting agent dministered acetone in the drir in male and female rats used i re not associated with histopat	to the skin. Acetone is an eye irritant. The subchiking water and again in rats treated by oral gaven the oral 13-week study. Acetone treatment cathologic effects and the effects may have been
ACETONE	vesicles, scaling and thickening of the skin. for acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or set toxicity of acetone has been examined in mice and rats that were an Acetone-induced increases in relative kidney weight changes were observed increases in the relative liver weight in male and female rats that we associated with microsomal enzyme induction. Haematologic effects consistent with the spleen. The material may cause skin irritation after prolonged or repeated exvesicles, scaling and thickening of the skin. The acute oral toxicity of propylene glycol is very low, and large qua generally occurs only at plasma concentrations over 1 g/L, which remarly	ensitiser but is a defatting agent dministered acetone in the drir in male and female rats used is re not associated with histopat macrocytic anaemia were also exposure and may produce on contities are required to cause pequires extremely high intake or	to the skin. Acetone is an eye irritant. The subch aking water and again in rats treated by oral gaven the oral 13-week study. Acetone treatment cathologic effects and the effects may have been a noted in male rats along with hyperpigmentation contact skin redness, swelling, the production of erceptible health damage in humans. Serious to the relatively short period of time. It would be
	vesicles, scaling and thickening of the skin. for acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or se toxicity of acetone has been examined in mice and rats that were an Acetone-induced increases in relative kidney weight changes were observed increases in the relative liver weight in male and female rats that we associated with microsomal enzyme induction. Haematologic effects consistent with the spleen. The material may cause skin irritation after prolonged or repeated expected, scaling and thickening of the skin. The acute oral toxicity of propylene glycol is very low, and large quagenerally occurs only at plasma concentrations over 1 g/L, which reconstructions.	ensitiser but is a defatting agent dministered acetone in the drir in male and female rats used in renot associated with histopat macrocytic anaemia were also exposure and may produce on contities are required to cause prequires extremely high intake on a continuous continuous accidental ingestion of large que a glycol was classified by the U on the skin. Undiluted propylene	to the skin. Acetone is an eye irritant. The subchiking water and again in rats treated by oral gaven the oral 13-week study. Acetone treatment cathologic effects and the effects may have been onted in male rats along with hyperpigmentation contact skin redness, swelling, the production of erceptible health damage in humans. Serious tower a relatively short period of time. It would be of PG. Cases of propylene glycol poisoning are lantities by children. The potential for long-term of the production as "generally short period and Drug Administration as "generally short period of the supplies that the production is the production of the
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Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	
		Legend: X	Data available but does not fill the criteria for



- Data required to make classification available
- Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

EC50	384	Crustacea	97.013mg/L	3
EC50	48	Crustacea	>100mg/L	4
EC50	96	Algae or other aquatic plants	20.565mg/L	4
LC50	96	Fish	>100mg/L	4
NOEC	96	Algae or other aquatic plants	4.950mg/L	4
EC50	384	Crustacea	311.145mg/L	3
EC50	96	Algae or other aquatic plants	10905.921mg/L	3
EC50	48	Crustacea	>1000mg/L	4
LC50	96	Fish	710mg/L	4
NOEC	168	Fish	98mg/L	4
LC50	96	Fish	24.11mg/L	2
EC50	96	Algae or other aquatic plants	7.71mg/L	2
EC50	96	Algae or other aquatic plants	8.57mg/L	2
LC50	96	Fish	24.11mg/L	2
EC50	96	Algae or other aquatic plants	7.71mg/L	2
EC50	96	Algae or other aquatic plants	8.57mg/L	2
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(Japan) Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

For Petroleum Hydrocarbon Gases:

Environmental Fate: Petroleum hydrocarbon gases are primarily produced in petroleum refineries, or in gas plants that separate natural gas and natural gas liquids. This category contains 99 petroleum hydrocarbon gas substances, the majority of which never reach the consumer. Petroleum hydrocarbon gases do not contain inorganic compounds, (e.g. hydrogen sulfide, ammonia, and

carbon monoxide), other than asphyxiant gases; the low molecular weight hydrocarbon molecules are primarily responsible for the hazard associated with these gases. Atmospheric Fate: All components of these gases will evaporate to the air where interaction with hydroxyl radicals is an important fate process. Substances in refinery gases that evaporate to air may undergo indirect, gas-phase oxidation reaction with hydroxyl radicals and this is an important fate process for these substances. Half-lives for refinery gases range from 960 days, (methane), to 0.16 days, (butadiene). The constituents of the C5- C6 hydrocarbon gases have light breakdown half-lives of approximately two days. DO NOT discharge into sewer or waterways

For Acetone: log Kow: 0.24:

Half-life (hr) air : 312-1896: Half-life (hr) H2O surface water : 20; Henry's atm m3 /mol : 3.67E-05 BOD 5: 0.31-1.76,46-55% COD: 1.12-2.07 ThOD: 2.2BCF: 0.69.

Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.

Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days. Air Quality Standards: none available.

Terrestrial Fate: Very little acetone is expected to reside in soil, biota, or suspended solids and has low propensity for soil absorption and a high preference for moving through the soil and into the ground water. Acetone released to soil volatilizes although some may leach into the ground where it rapidly biodegrades

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
propylene glycol	LOW	LOW

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Ingredient	Bioaccumulation
acetone	LOW (BCF = 0.69)
propylene glycol	LOW (BCF = 1)
Mobility in soil	
Ingredient	Mobility
acetone	HIGH (KOC = 1.981)
propylene glycol	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ▶ It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. • Where in doubt contact the responsible authority.
- ▶ Consult State Land Waste Management Authority for disposal.
- ▶ Discharge contents of damaged aerosol cans at an approved site.
- ▶ Allow small quantities to evaporate.
- DO NOT incinerate or puncture aerosol cans.
- ▶ Bury residues and emptied aerosol cans at an approved site.

SECTION 14 TRANSPORT INFORMATION

disposal

Labels Required	
	FLAMMABLE OAS 2
Marine Pollutant	NO
HAZCHEM	Not Applicable
Land transport (ADG)	
UN number	1950
Packing group	Not Applicable
UN proper shipping name	AEROSOLS
Environmental hazard	Not Applicable
Transport hazard class(es)	Class 2.1 Subrisk Not Applicable
Special precautions for user	Special provisions 63 190 277 327 344 Limited quantity 1000ml
Air transport (ICAO-IATA / DG	R)
UN number	1950
Packing group	Not Applicable
UN proper shipping name	Aerosols, flammable; Aerosols, flammable (engine starting fluid)
Environmental hazard	Not Applicable
	ICAO/IATA Class 2.1
Transport hazard	ICAO / IATA Subrisk Not Applicable
class(es)	ERG Code 10L

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Special precautions for	r
user	

Special provisions	A145A167A802; A1A145A167A802		
Cargo Only Packing Instructions	203		
Cargo Only Maximum Qty / Pack	150 kg		
Passenger and Cargo Packing Instructions	203; Forbidden		
Passenger and Cargo Maximum Qty / Pack	75 kg; Forbidden		
Passenger and Cargo Limited Quantity Packing Instructions Y203; Forbidden			
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G; Forbidden		

Sea transport (IMDG-Code / GGVSee)

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UN number	1950
Packing group	Not Applicable
UN proper shipping name	AEROSOLS
Environmental hazard	Not Applicable
Transport hazard class(es)	IMDG Class 2.1 IMDG Subrisk Not Applicable
Special precautions for user	EMS Number F-D, S-U Special provisions 63 190 277 327 344 959 Limited Quantities 1000ml

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

ACETONE(67-64-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

PROPYLENE GLYCOL(57-55-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

HYDROCARBON PROPELLANT(68476-85-7.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List

Passenger and Cargo Aircraft

	Passenger and Cargo Aircraft
National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (acetone; propylene glycol; hydrocarbon propellant)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
hydrocarbon propellant	68476-85-7., 68476-86-8.

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: $\underline{www.chemwatch.net}$

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.