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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION  
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PRODUCT NAME  
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WATTYL KILLRUST HAMMERED FINISH AEROSOL MCR

SYNONYMS  
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"spray pack hammer finish beaten finish aerosol"

PROPER SHIPPING NAME  
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AEROSOLS

PRODUCT USE  
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Aerosol paint to give a hammered/beaten finish. Used according to manufacturers directions. Application is by spray atomisation from a hand held aerosol pack.

SUPPLIER  
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Company: WattyL Australia Pty Ltd  
Address:  
4 Steel St  
Blacktown  
NSW, 2148  
AUS  
Telephone: +61 2 9621 6255  
Emergency Tel: 1800 039 008  
Fax: +61 2 9831 4244

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Section 2 - HAZARDS IDENTIFICATION  
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STATEMENT OF HAZARDOUS NATURE  
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HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE  
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None

RISK  
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Extremely flammable.  
Irritating to eyes and skin.  
Risk of explosion if heated under confinement.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Possible risk of impaired fertility.

SAFETY  
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Keep container in a well ventilated place.  
Avoid exposure - obtain special instructions before use.  
To clean the floor and all objects contaminated by this material, use water and detergent.  
Keep container tightly closed.  
Keep away from food, drink and animal feeding stuffs.  
Take off immediately all contaminated clothing.  
In case of contact with eyes, rinse with plenty of water and contact Doctor or

Poisons Information Centre.  
If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).  
If you feel unwell contact Doctor or Poisons Information Centre. (Show the label if possible).

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS  
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NAME	CAS RN	%
alkyd resin - unregulated	63148-69-6	10-20
n-hexane	110-54-3	10-20
acetone	67-64-1	10-20
white spirit	8052-41-3.	10-20
naphtha petroleum, light aromatic solvent	64742-95-6.	1-9
toluene	108-88-3	<1
additives, pigments		1-2
propellant		
hydrocarbon propellant	68476-85-7.	10-30
contains less than 0.1% benzene		

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Section 4 - FIRST AID MEASURES  
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SWALLOWED  
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If poisoning occurs, contact a doctor or Poisons Information Centre.  
· If swallowed do NOT induce vomiting.  
· If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.  
· Observe the patient carefully.  
· Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious  
· Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.  
· Seek medical advice.

EYE  
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If this product comes in contact with the eyes:  
· Immediately hold eyelids apart and flush the eye continuously with 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.  
· Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.  
· Transport to hospital or doctor without delay.  
· Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN  
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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.

INHALED  
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· If fumes or combustion products are inhaled remove from contaminated area.  
· 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.  
· Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.  
· Transport to hospital, or doctor.

NOTES TO PHYSICIAN  
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For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO<sub>2</sub> 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology].

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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

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- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

### FIRE/EXPLOSION HAZARD

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- 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.
  - Rupturing containers may rocket and scatter burning materials.
  - Hazards may not be restricted to pressure effects.
  - May emit acrid, poisonous or corrosive fumes.
  - On combustion, may emit toxic fumes of carbon monoxide (CO).
- Other combustion products include carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).

### FIRE INCOMPATIBILITY

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Avoid contamination with strong oxidising agents as ignition may result.

### HAZCHEM

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2Y

### Personal Protective Equipment

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Breathing apparatus.  
 Gas tight chemical resistant suit.  
 Limit exposure duration to 1 BA set 30 mins.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### EMERGENCY PROCEDURES

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#### MINOR SPILLS

- 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.
- Undamaged cans should be gathered and stowed safely.

#### EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

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The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

life-threatening health effects is:

n-hexane	1100 ppm
acetone	8500 ppm
white spirit	8500 ppm
hydrocarbon propellant	8500 ppm

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:

n-hexane	250 ppm
acetone	8500 ppm
white spirit	8500 ppm
hydrocarbon propellant	8500 ppm

other than mild, transient adverse effects without perceiving a clearly defined odour is:

n-hexane	150 ppm
acetone	1000 ppm
white spirit	1000 ppm
hydrocarbon propellant	1000 ppm

The threshold concentration below which most people will experience no appreciable risk of health effects:

n-hexane	50 ppm
acetone	1000 ppm
white spirit	1000 ppm
hydrocarbon propellant	1000 ppm

#### American Industrial Hygiene Association (AIHA)

Ingredients considered according exceed the following cutoffs

Very Toxic (T+) >= 0.1%	Toxic (T) >= 3.0%
R50 >= 0.25%	Corrosive (C) >= 5.0%
R51 >= 2.5%	
else >= 10%	

where percentage is percentage of ingredient found in the mixture

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

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#### Section 7 - HANDLING AND STORAGE

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#### PROCEDURE FOR HANDLING

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Avoid generating and breathing mist.

- Avoid all personal contact, including inhalation.
- wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- 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.
- When handling, DO NOT eat, drink or smoke.
- DO NOT incinerate or puncture aerosol cans.
- DO NOT spray directly on humans, exposed food or food utensils.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

DO NOT spray directly on humans, exposed food or food utensils.

SUITABLE CONTAINER

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

STORAGE REQUIREMENTS

- 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.
  - Avoid storage at temperatures higher than 40 deg C.
  - Store in an upright position.
  - Protect containers against physical damage.
  - Check regularly for spills and leaks.
  - Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source Peak mg/m <sup>3</sup>	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm
Australia Exposure Standards	Hexane (n-Hexane)	20	72			
Australia Exposure Standards	Acetone	500	1185	1000	2375	
Australia Exposure Standards	white spirits		790			
Australia Exposure Standards	Toluene	50	191	150	574	
Australia Exposure Standards	LPG (liquified petroleum gas)	1,000	1,800			
No data available:	alkyd resin - unregulated as (CAS: 63148-69-6)					
No data available:	white spirit as (CAS: 8042-47-5)					
No data available:	naphtha petroleum, light aromatic solvent as (CAS: 64742-95-6)					
No data available:	hydrocarbon propellant as (CAS: 68476-86-8)					

EMERGENCY EXPOSURE LIMITS

Material	Revised IDLH Value (ppm)	Revised IDLH Value (mg/m <sup>3</sup> )
n-Hexane	1,100 [LEL]	
Acetone	2,500 [LEL]	
Stoddard solvent		20,000
Toluene	500	
L.P.G.	2,000 [LEL]	

NOTES

Values marked LEL indicate that the IDLH was based on 10% of the lower explosive limit for safety considerations even though the relevant toxicological data indicated that irreversible health effects or impairment of escape existed only at higher concentrations.

#### INGREDIENT DATA

##### ALKYD RESIN - UNREGULATED:

No exposure limits set by NOHSC or ACGIH.

##### N-HEXANE:

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

Odour Threshold value: 65 ppm

NOTE: Detector tubes for n-hexane, measuring in excess of 100 ppm, are available commercially.

Occupational polyneuropathy may result from exposures as low as 500 ppm (as hexane), whilst nearly continuous exposures of 250 ppm have caused neurotoxic effects in animals. Many literature reports have failed to distinguish hexane from n-hexane and on the assumption that the commercial hexane contains 30% n-hexane, a worst case recommendation for TLV is assumed to reduce the risk of peripheral neuropathies (due to the metabolites 2,5-heptanedione and 3,6-octanedione) and other adverse neuropathic effects.

Concurrent exposure to chemicals (including MEK) and drugs which induce hepatic liver oxidative metabolism can reduce the time for neuropathy to appear.

##### ACETONE:

Odour Threshold Value: 3.6 ppm (detection), 699 ppm (recognition)

Saturation vapour concentration: 237000 ppm @ 20 C

NOTE: Detector tubes measuring in excess of 40 ppm, are available.

Exposure at or below the recommended TLV-TWA is thought to protect the worker against mild irritation associated with brief exposures and the bioaccumulation, chronic irritation of the respiratory tract and headaches associated with long-term acetone exposures. The NIOSH REL-TWA is substantially lower and has taken into account slight irritation experienced by volunteer subjects at 300 ppm. Mild irritation to acclimatised workers begins at about 750 ppm - unacclimatised subjects will experience irritation at about 350-500 ppm but acclimatisation can occur rapidly. Disagreement between the peak bodies is based largely on the view by ACGIH that widespread use of acetone, without evidence of significant adverse health effects at higher concentrations, allows acceptance of a higher limit.

Half-life of acetone in blood is 3 hours which means that no adjustment for shift-length has to be made with reference to the standard 8 hour/day, 40 hours per week because body clearance occurs within any shift with low potential for accumulation.

A STEL has been established to prevent excursions of acetone vapours that could cause depression of the central nervous system.

##### WHITE SPIRIT:

Low and high odour thresholds of 5.25 and 157.5 mg/m<sup>3</sup>, respectively, were considered to provide a rather useful index of odour as a warning property. The TLV-TWA is calculated from data on the toxicities of the major ingredients and is intended to minimise the potential for irritative and narcotic effects, polyneuropathy and kidney damage produced by vapours.

The NIOSH (USA) REL-TWA of 60 ppm is the same for all refined petroleum solvents. NIOSH published an occupational "action level" of 350 mg/m<sup>3</sup> for exposure to Stoddard solvent, assuming a 10-hour work shift and a 40-hour work-week. The NIOSH-REL ceiling of 1800 mg/m<sup>3</sup> was established to protect workers from short-term effects that might produce vertigo or other adverse effects which might increase the risk of occupational accidents. Combined (gross) percutaneous absorption and inhalation exposure (at concentrations associated with nausea) are thought, by some, to be responsible for the development of frank hepatic toxicity and jaundice.

##### NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

No exposure limits set by NOHSC or ACGIH.

REL TWA: 25-100 ppm\*, 125 mg/m<sup>3</sup>\* [Various Manufacturers]

CEL TWA: 50 ppm, 125 mg/m<sup>3</sup>

##### TOLUENE:

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for

inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.  
 Odour Threshold value: 0.16-6.7 (detection), 1.9-69 (recognition)  
 NOTE: Detector tubes measuring in excess of 5 ppm, are available.  
 High concentrations of toluene in the air produce depression of the central nervous system (CNS) in humans. Intentional toluene exposure (glue-sniffing) at maternally-intoxicating concentration has also produced birth defects. Foetotoxicity appears at levels associated with CNS narcosis and probably occurs only in those with chronic toluene-induced kidney failure. Exposure at or below the recommended TLV-TWA is thought to prevent transient headache and irritation, to provide a measure of safety for possible disturbances to human reproduction, the prevention of reductions in cognitive responses reported amongst humans inhaling greater than 40 ppm, and the significant risks of hepatotoxic, behavioural and nervous system effects (including impaired reaction time and incoordination). Although toluene/ethanol interactions are well recognised, the degree of protection afforded by the TLV-TWA among drinkers is not known.

HYDROCARBON PROPELLANT:

PERSONAL PROTECTION

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EYE

- Safety glasses with side shields; or as required,
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

wear general protective gloves, eg. light weight rubber gloves.

OTHER

- Overalls.
- Eyewash unit.

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection: n-hexane, acetone, toluene

Protective Material CPI \*.

PE/EVAL/PE	A
SARANEX-23 2-PLY	B
TEFLON	B
PVA	B
VITON	B
BUTYL/NEOPRENE	C
BUTYL	C
NITRILE	C
NITRILE+PVC	C
NEOPRENE	C
PVC	C
NATURAL RUBBER	C
VITON/CHLOROBUTYL	C

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

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

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* 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.

#### RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	AX-AUS P-	-
1000	50	-	AX-AUS P-
5000	50	Airline *	-
5000	100	-	AX-2 P-
10000	100	-	AX-3 P-
	100+		Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

#### ENGINEERING CONTROLS

Use in a well-ventilated area.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood - local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after

reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

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Coloured highly flammable liquid with a solvent odour; does not mix with water.  
Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon propellant.

### PHYSICAL PROPERTIES

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Liquid.

Gas.

Does not mix with water.

Molecular weight: Not applicable  
Melting Range (C): Not available  
Solubility in water (g/L): Immiscible  
pH (1% solution): Not applicable  
PRESSURE  
Volatile Component (%vol): Not available  
Relative Vapour Density (air=1): >1  
Lower Explosive Limit (%): Not available  
Autoignition Temp (C): Not available  
available  
State: Liquid

Boiling Range (C): Not available  
Specific Gravity (water=1): Not  
pH (as supplied): Not applicable  
Vapour Pressure (kPa): UNDER  
Evaporation Rate: Not available  
Flash Point (C): -81 propellant  
Upper Explosive Limit (%): Not  
Decomposition Temp (°C): Not

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## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

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### CONDITIONS CONTRIBUTING TO INSTABILITY

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- Elevated temperatures.
- Presence of open flame.
- Product is considered stable.
- Hazardous polymerisation will not occur.

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## Section 11 - TOXICOLOGICAL INFORMATION

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### POTENTIAL HEALTH EFFECTS

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#### ACUTE HEALTH EFFECTS

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##### SWALLOWED

Overexposure is unlikely in this form.  
The liquid is highly discomforting and harmful if swallowed. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

##### EYE

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. The vapour is discomforting to the eyes.  
The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

#### SKIN

The liquid is highly discomforting to the skin. if exposure is prolonged and is capable of causing skin reactions which may lead to dermatitis.

Toxic effects may result from skin absorption.

The material may accentuate any pre-existing dermatitis condition.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

#### INHALED

The vapour is discomforting to the upper respiratory tract and lungs.

Inhalation hazard is increased at higher temperatures.

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

Inhalation of vapour may aggravate a pre-existing respiratory condition such as asthma, bronchitis, emphysema.

WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

#### CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact, with the material and inhalation of vapour/spray mist. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following. WARNING: Aerosol containers may present pressure related hazards. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

#### TOXICITY AND IRRITATION

Not available. Refer to individual constituents.  
unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

#### ALKYD RESIN - UNREGULATED:

"alkyd resin" describes a generic insoluble polymer which has no residual hazardous reactants and is not absorbed in the gastro-intestinal tract. No acute or chronic human exposure / toxicity data available. Almost always in solvent solution - the hazard is from the solvent.

#### N-HEXANE:

##### TOXICITY

Oral (rat) LD50: 28710 mg/kg  
Inhalation (human) TCLO: 190 ppm/8w  
Inhalation (rat) LD50: 48000 ppm/4h

##### IRRITATION

Eye (rabbit): 10 mg - Mild

#### ACETONE:

##### TOXICITY

Oral (man) TDLo: 2857 mg/kg  
Oral (rat) LD50: 5800 mg/kg  
Inhalation (human) TCLO: 500 ppm  
Inhalation (man) TCLO: 12000 ppm/4 hr  
Inhalation (man) TCLO: 10 mg/m<sup>3</sup>/6 hr  
Inhalation (rat) LC50: 50100 mg/m<sup>3</sup>/8 hr  
Dermal (rabbit) LD50: 20000 mg/kg

##### IRRITATION

Eye (human): 500 ppm - Irritant  
Eye (rabbit): 3.95 mg - SEVERE  
Eye (rabbit): 20mg/24hr -Moderate  
Skin (rabbit):395mg (open) - Mild  
Skin (rabbit): 500 mg/24hr - Mild

#### WHITE SPIRIT:

##### TOXICITY

Inhalation (human) TCLO: 600 mg/m<sup>3</sup>/8h  
white spirit, as CAS RN 8052-41-3  
Oral (rat) LD50: >5000 mg/kg  
Inhalation (rat) LC50: >5500 mg/m<sup>3</sup>/4h

##### IRRITATION

Nil Reported  
Eye (human): 470 ppm/15m  
Eye (rabbit): 500 mg/24h moderate

#### NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

##### TOXICITY

##### IRRITATION

Oral (rat) LD50: >5000 mg/kg \*  
Inhalation (rat) LC50: >3670 ppm/8 h \*  
Inhalation (rat) TCLO: 1320 ppm/6h/90D-I  
\* [Devoe]

Nil Reported

TOLUENE:

TOXICITY

Oral (human) LDLo: 50 mg/kg  
Oral (rat) LD50: 636 mg/kg  
Inhalation (human) TCLO: 100 ppm  
Inhalation (man) TCLO: 200 ppm  
Inhalation (rat) LC50: >26700 ppm/1h  
Dermal (rabbit) LD50: 12124 mg/kg

IRRITATION

Skin (rabbit): 20 mg/24h-Moderate  
Skin (rabbit): 500 mg - Moderate  
Eye (rabbit): 0.87 mg - Mild  
Eye (rabbit): 2 mg/24h - SEVERE  
Eye (rabbit): 100 mg/30sec - Mild

Reproductive effector in rats

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

HYDROCARBON PROPELLANT:

Not available. Refer to individual constituents.

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Section 12 - ECOLOGICAL INFORMATION  
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Marine Pollutant: Not Determined

No data for Watty1 Killrust Hammered Finish Aerosol MCR.

Refer to data for ingredients, which follows:

N-HEXANE:

Hazardous Air Pollutant: Yes  
Fish LC50 (96hr.) (mg/l): 4 (24hr)  
Algae IC50 (72hr.) (mg/l): 10  
log Kow (Sangster 1997): 3.9  
BOD5: 2.21  
COD: 0.04  
ThOD: 3.52

The lower molecular weight hydrocarbons are expected to form a "slick" on the surface of waters after release in calm sea conditions. This is expected to evaporate and enter the atmosphere where it will be degraded through reaction with hydroxy radicals.

Some of the material will become associated with benthic sediments, and it is likely to be spread over a fairly wide area of sea floor. Marine sediments may be either aerobic or anaerobic. The material, in probability, is biodegradable, under aerobic conditions (isomerised olefins and alkenes show variable results). Evidence also suggests that the hydrocarbons may be degradable under anaerobic conditions although such degradation in benthic sediments may be a relatively slow process.

Under aerobic conditions the material will degrade to water and carbon dioxide, while under anaerobic processes it will produce water, methane and carbon dioxide.

Based on test results, as well as theoretical considerations, the potential for bioaccumulation may be high. Toxic effects are often observed in species such as blue mussel, daphnia, freshwater green algae, marine copepods and amphipods.

log Kow: 3.17-3.94  
BOD 5 if unstated: 2.21  
COD: 0.04  
ThOD: 3.52  
Nitrif. inhib.: nil at 100mg/L

ACETONE:

Fish LC50 (96hr.) (mg/l): 8300-40000  
Daphnia magna EC50 (48hr.) (mg/l): 10  
log Kow (Prager 1995): -0.24  
log Kow (Sangster 1997): -0.24  
log Pow (Verschueren 1983): -0.24  
BOD5: 122%  
ThOD: 72  
Half-life Soil - High (hours): 168  
Half-life Soil - Low (hours): 24  
Half-life Air - High (hours): 2790

Half-life Air - Low (hours): 279  
Half-life Surface water - High (hours): 168  
Half-life Surface water - Low (hours): 24  
Half-life Ground water - High (hours): 336  
Half-life Ground water - Low (hours): 48  
Aqueous biodegradation - Aerobic - High (hours): 168  
Aqueous biodegradation - Aerobic - Low (hours): 24  
Aqueous biodegradation - Anaerobic - High (hours): 672  
Aqueous biodegradation - Anaerobic - Low (hours): 96  
Aqueous biodegradation - Removal secondary treatment - High (hours): 75%  
Aqueous biodegradation - Removal secondary treatment - Low (hours): 54%  
Aqueous photolysis half-life - High (hours): 270  
Photooxidation half-life water - High (hours): 3.97E+06  
Photooxidation half-life water - Low (hours): 9.92E+04  
Photooxidation half-life air - High (hours): 2790  
Photooxidation half-life air - Low (hours): 279

log Kow: -0.24

Half-life (hr) air: 312-1896  
Half-life (hr) H2O surface water: 20  
Henry's atm m<sup>3</sup> /mol: 3.67E-05  
BOD 5 if unstated: 0.31-1.76, 46-55%  
COD: 1.12-2.07  
ThOD: 2.2  
BCF: 0.69

Toxicity Fish: LC50(96) 5540-13000mg/L  
Toxicity invertebrate: cell mult. inhib. 28-7500mg/L

Bioaccumulation: not sig  
Nitrif. inhib.: 75% decr. at 840mg/L  
Anaerobic effects: sig degrad

Degradation Biological: sig  
processes Abiotic: Rxn OH\*, photodissoc  
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. The relatively long half-life allows acetone to be transported long distances from its emission source.

Acetone is highly soluble and slightly persistent in water, with a half-life of about 20 hours; it is minimally toxic to aquatic life. Acetone released to soil volatilises although some may leach into the ground where it rapidly biodegrades.

Acetone does not concentrate in the food chain.

Drinking water Standard: none available.

Soil Guidelines: none available.

Air Quality Standards: none available.

#### TOLUENE:

Hazardous Air Pollutant: Yes  
Fish LC50 (96hr.) (mg/l): 7.3-22.8  
BCF<100: 13.2 (EELS  
log Kow (Sangster 1997): 2.73  
log Pow (Verschueren 1983): 2.69  
BOD5: 5%  
COD: 21%

ThOD: 3.13

Half-life Soil - High (hours): 528

Half-life Soil - Low (hours): 96

Half-life Air - High (hours): 104

Half-life Air - Low (hours): 10

Half-life Surface water - High (hours): 528

Half-life Surface water - Low (hours): 96

Half-life Ground water - High (hours): 672

Half-life Ground water - Low (hours): 168

Aqueous biodegradation - Aerobic - High (hours): 528

Aqueous biodegradation - Aerobic - Low (hours): 96

Aqueous biodegradation - Anaerobic - High (hours): 5040

Aqueous biodegradation - Anaerobic - Low (hours): 1344

Aqueous biodegradation - Removal secondary treatment - High (hours): 75%

Photolysis maximum light absorption - High (nano-m): 268

Photolysis maximum light absorption - Low (nano-m): 253.5

Photooxidation half-life water - High (hours): 1284

Photooxidation half-life water - Low (hours): 321

Photooxidation half-life air - High (hours): 104

Photooxidation half-life air - Low (hours): 10

log Kow: 2.1-3  
log Koc: 1.12-2.85  
Koc: 37-250  
log Kom: 1.39-2.89  
Half-life (hr) air: 2.4-104  
Half-life (hr) H2O surface water: 5.55-528  
Half-life (hr) H2O ground: 168-2628  
Half-life (hr) soil: <48-240  
Henry's Pa m<sup>3</sup> /mol: 518-694  
Henry's atm m<sup>3</sup> /mol: 5.94E-03  
BOD 5 if unstated: 0.86-2.12,5%  
COD: 0.7-2.52,21-27%  
ThOD: 3.13  
BCF: 1.67-380  
Log BCF: 0.22-3.28

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Section 13 - DISPOSAL CONSIDERATIONS  
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- Recycle where possible
- Otherwise ensure that:
  - licenced contractors dispose of the product and its container.
  - disposal occurs at a licenced facility.

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Section 14 - TRANSPORTATION INFORMATION  
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Labels Required

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flammable gas

HAZCHEM

-----  
2Y

Land Transport UNDG:

-----  
Dangerous Goods Class: 2.1 Subrisk: None  
UN Number: 1950 Packing Group: None  
Shipping Name: AEROSOLS

Air Transport IATA:

-----  
ICAO/IATA Class: 2.1 ICAO/IATA Subrisk: None  
UN/ID Number: 1950 Packing Group: None  
ERG Code: 10L  
Shipping Name: Aerosols, flammable

Maritime Transport IMDG:

-----  
IMDG Class: 2 IMDG Subrisk: SP63  
UN Number: 1950 Packing Group: None  
EMS Number: F-D,S-U Marine Pollutant: Not

Determined

Shipping Name: AEROSOLS

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Section 15 - REGULATORY INFORMATION  
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POISONS SCHEDULE

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None

REGULATIONS

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alkyd resin - unregulated (CAS: 63148-69-6) is found on the following regulatory lists;  
Australia Inventory of Chemical Substances (AICS)  
  
n-hexane (CAS: 110-54-3) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)  
Australia Poisons Schedule

acetone (CAS: 67-64-1) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)  
Australia Poisons Schedule

white spirit (CAS: 8052-41-3) is found on the following regulatory lists;  
Australia Inventory of Chemical Substances (AICS)  
Australia Poisons Schedule

white spirit (CAS: 8042-47-5) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)

naphtha petroleum, light aromatic solvent (CAS: 64742-95-6) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)  
Australia Poisons Schedule

toluene (CAS: 108-88-3) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)  
Australia Poisons Schedule

hydrocarbon propellant (CAS: 68476-85-7) is found on the following regulatory lists;  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)

hydrocarbon propellant (CAS: 68476-86-8) is found on the following regulatory lists;  
Australia Inventory of Chemical Substances (AICS)

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Section 16 - OTHER INFORMATION

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