

Wynn's (P) Turbo Cleaner Aerosol

ITW Polymers & Fluids

Chemwatch Hazard Alert Code: 4

Chemwatch: 5329-81

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Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

S.GHS.AUS.EN

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

Product Identifier

Product name	Wynn's (P) Turbo Cleaner Aerosol
Chemical Name	Not Applicable
Synonyms	Part Number: 28679
Proper shipping name	AEROSOLS
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses	Internal cleaning of petrol fuel systems including fuel injectors. Application is by spray atomisation from a hand held aerosol pack
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Details of the supplier of the safety data sheet

Registered company name	ITW Polymers & Fluids
Address	1-9 Nina Link, Dandenong South VIC 3175 Australia
Telephone	02 9757 8800
Fax	Not Available
Website	www.itwaamtech.com.au
Email	Not Available

Emergency telephone number

Association / Organisation	Chemwatch	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	1800 039 008	+61 2 9186 1132
Other emergency telephone numbers	Not Available	+61 1800 951 288

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

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

Poisons Schedule	Not Applicable
Classification ^[1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Carcinogenicity Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
AUH044	Risk of explosion if heated under confinement.

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P261	Avoid breathing mist/vapours/spray.

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.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available		hydrocarbons, C10, aromatics, <1% naphthalene, as
1189173-42-9	25-50	<u>solvent naphtha petroleum, heavy aromatic</u>
68512-91-4	10-25	<u>hydrocarbons, C3-4 rich, petroleum distillate</u>
111-76-2	5-10	<u>ethylene glycol monobutyl ether</u>
34590-94-8	5-10	<u>dipropylene glycol monomethyl ether</u>
112-34-5	2.5-5	<u>diethylene glycol monobutyl ether</u>
160875-66-1	2.5-5	<u>2-propylheptanol, ethoxylated</u>
68603-38-3	1-2.5	<u>stearamide diethanolamide</u>
68155-07-7	1-2.5	<u>cocamide diethanolamide.</u>
Not Available	balance	Ingredients determined not to be hazardous

Legend: 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available

SECTION 4 First aid measures

Description of first aid measures

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.
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	<ul style="list-style-type: none"> ▶ 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	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<p>If aerosols, fumes or combustion products are inhaled:</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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.

Indication of any immediate medical attention and special treatment needed

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 (pO₂ 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]

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

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ 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.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ 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. <p>Combustion products include: carbon dioxide (CO₂) nitrogen oxides (NO_x) other pyrolysis products typical of burning organic material.</p>
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▸ 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.
Major Spills	<ul style="list-style-type: none"> ▸ 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.

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

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▸ 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.
Other information	<ul style="list-style-type: none"> ▸ 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.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▸ Aerosol dispenser. ▸ Check that containers are clearly labelled.
Storage incompatibility	<ul style="list-style-type: none"> ▸ Avoid reaction with oxidising agents ▸ Avoid strong acids, bases.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm / 96.9 mg/m ³	242 mg/m ³ / 50 ppm	Not Available	Not Available
Australia Exposure Standards	dipropylene glycol monomethyl ether	(2-Methoxymethylethoxy) propanol	50 ppm / 308 mg/m ³	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
ethylene glycol monobutyl ether	60 ppm	120 ppm	700 ppm
dipropylene glycol monomethyl ether	150 ppm	1700* ppm	9900** ppm
diethylene glycol monobutyl ether	30 ppm	33 ppm	200 ppm

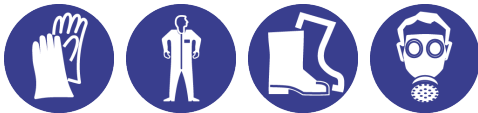
Ingredient	Original IDLH	Revised IDLH
solvent naphtha petroleum, heavy aromatic	Not Available	Not Available
hydrocarbons, C3-4 rich, petroleum distillate	Not Available	Not Available
ethylene glycol monobutyl ether	700 ppm	Not Available

Ingredient	Original IDLH	Revised IDLH
dipropylene glycol monomethyl ether	600 ppm	Not Available
diethylene glycol monobutyl ether	Not Available	Not Available
2-propylheptanol, ethoxylated	Not Available	Not Available
stearamide diethanolamide	Not Available	Not Available
cocamide diethanolamide.	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
diethylene glycol monobutyl ether	E	≤ 0.1 ppm
2-propylheptanol, ethoxylated	E	≤ 0.1 ppm
stearamide diethanolamide	E	≤ 0.01 mg/m ³
cocamide diethanolamide.	E	≤ 0.1 ppm
Notes:	<i>Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.</i>	

Exposure controls

Appropriate engineering controls	<p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p>
Personal protection	
Eye and face protection	<p>No special equipment for minor exposure i.e. when handling small quantities.</p> <p>OTHERWISE: For potentially moderate or heavy exposures:</p> <ul style="list-style-type: none"> ▸ 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
Hands/feet protection	<p>Neoprene or Nitrile rubber gloves are recommended.</p> <ul style="list-style-type: none"> ▸ No special equipment needed when handling small quantities. ▸ OTHERWISE: ▸ For potentially moderate exposures: ▸ Wear general protective gloves, eg. light weight rubber gloves. ▸ For potentially heavy exposures: ▸ Wear chemical protective gloves, eg. PVC. and safety footwear.
Body protection	See Other protection below
Other protection	<p>No special equipment needed when handling small quantities.</p> <p>OTHERWISE:</p> <ul style="list-style-type: none"> ▸ Overalls. ▸ Skin cleansing cream. ▸ Eyewash unit. ▸ The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. ▸ Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. <p>BREThERICK: Handbook of Reactive Chemical Hazards.</p>

Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid with solvent odour; does not mix with water. Supplied as an aerosol pack. Contents under PRESSURE . Contains highly flammable hydrocarbon propellant.		
Physical state	Liquid	Relative density (Water = 1)	0.842
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	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
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (%)	Not Applicable
Vapour density (Air = 1)	>1	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none">▸ 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

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	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. 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.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition 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.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. On the basis of limited epidemiological or animal data, it has been concluded that prolonged inhalation of the material, in an

occupational setting, may increase the risk of cancer in humans.

Wynn's (P) Turbo Cleaner Aerosol	TOXICITY	IRRITATION
	Not Available	Not Available
solvent naphtha petroleum, heavy aromatic	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Eye (rabbit): Irritating
	Inhalation(Rat) LC50; >0.003 mg/L4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; 512 mg/kg ^[1]	Skin: adverse effect observed (irritating) ^[1]
hydrocarbons, C3-4 rich, petroleum distillate	TOXICITY	IRRITATION
	Inhalation(Rat) LC50; 658 mg/l4h ^[2]	Not Available
ethylene glycol monobutyl ether	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 667 mg/kg ^[1]	Eye (rabbit): 100 mg SEVERE
	Inhalation(Rat) LC50; 2.21 mg/l4h ^[2]	Eye (rabbit): 100 mg/24h-moderate
	Oral(Guinea) LD50; 1414 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
		Skin (rabbit): 500 mg, open; mild
		Skin: adverse effect observed (irritating) ^[1]
		Skin: no adverse effect observed (not irritating) ^[1]
dipropylene glycol monomethyl ether	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 9500 mg/kg ^[2]	Eye (human): 8 mg - mild
	Oral(Rat) LD50; >5000 mg/kg ^[1]	Eye (rabbit): 500 mg/24hr - mild
		Skin (rabbit): 238 mg - mild
		Skin (rabbit): 500 mg (open)-mild
diethylene glycol monobutyl ether	TOXICITY	IRRITATION
	dermal (guinea pig) LD50: 1920 mg/kg ^[1]	Eye (rabbit): 20 mg/24h moderate
	Oral(Guinea) LD50; 1720-2310 mg/kg ^[2]	Eye (rabbit): 5 mg - SEVERE
2-propylheptanol, ethoxylated	TOXICITY	IRRITATION
	Not Available	Not Available
stearamide diethanolamide	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
	Oral(Rat) LD50; >3000 mg/kg ^[1]	Skin: adverse effect observed (irritating) ^[1]
cocamide diethanolamide.	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available
	Oral(Rat) LD50; >2000 mg/kg ^[1]	

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC	<p>Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins.</p> <p>The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of toluene lead to hearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.</p> <p>Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans.</p> <p>Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants).</p>
HYDROCARBONS, C3-4 RICH, PETROLEUM DISTILLATE	inhalation of the gas

<p>ETHYLENE GLYCOL MONOBUTYL ETHER</p>	<p>NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes. ** ASCC (NZ) SDS</p> <p>For ethylene glycol monoalkyl ethers and their acetates (EGMAEs): Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates. EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites). Further, rapid conversion of the aldehydes by aldehyde dehydrogenase produces alkoxyacetic acids, which are the predominant urinary metabolites of mono substituted glycol ethers. Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight. Four to six hour acute inhalation toxicity studies were conducted for these chemicals in rats at the highest vapour concentrations practically achievable. Values range from LC0 > 85 ppm (508 mg/m3) for EGHE, LC50 > 400ppm (2620 mg/m3) for EGBEA to LC50 > 2132 ppm (9061 mg/m3) for EGPE. Animal testing showed that exposure to ethylene glycol monobutyl ether resulted in toxicity to both the mother and the embryo. Reproductive effects were thought to be less than that of other monoalkyl ethers of ethylene glycol. Chronic exposure may cause anaemia, with enlargement and fragility of red blood cells. It is thought that in animals butoxyethanol may cause generalized clotting and bone infarction. In animals, 2-butoxyethanol also increased the rate of some cancers, including liver cancer. For ethylene glycol: Ethylene glycol is quickly and extensively absorbed throughout the gastrointestinal tract. Limited information suggests that it is also absorbed through the airways; absorption through skin is apparently slow. Following absorption, it is distributed throughout the body. In humans, it is initially metabolized by alcohol dehydrogenase to form glycoaldehyde, which is rapidly converted to glycolic acid and glyoxal.</p>
<p>DIPROPYLENE GLYCOL MONOMETHYL ETHER</p>	<p>For propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA) and tripropylene glycol methyl ether (TPM). Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive organs, the developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces and alkoxyacetic acid. The reproductive and developmental toxicities of the lower molecular weight homologues in the ethylene series are due specifically to the formation of methoxyacetic and ethoxyacetic acids. Longer chain homologues in the ethylene series are not associated with reproductive toxicity, but can cause haemolysis in sensitive species, also through formation of an alkoxyacetic acid. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p>
<p>DIETHYLENE GLYCOL MONOBUTYL ETHER</p>	<p>This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates. Studies show that they can cause kidney and liver damage, skin and eye irritation as well as blood changes but do not cause damage to the reproductive, genetic and developmental abnormalities, sensitisation or respiratory systems. However, DGEE is reported to cause sperm insufficiency.</p>
<p>2-PROPYLHEPTANOL, ETHOXYLATED</p>	<p>Humans have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents and other cleaning products. Exposure to these chemicals can occur through swallowing, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that relatively high volumes would have to occur to produce any toxic response. No death due to poisoning with alcohol ethoxylates has ever been reported. Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed.</p>
<p>COCAMIDE DIETHANOLAMIDE.</p>	<p>*Stephan SDS Ninol 49-CE The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. DEA has low acute toxicity if ingested orally or applied on the skin. It can cause moderate skin irritation and severe eye irritation. It may affect sperm production, cause anaemia and damage the liver and kidney. It has not been shown to cause cancer in humans; though there is evidence that it may cause cancer in mice, and damage to the foetus at levels toxic to the mother. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.</p>
<p>HYDROCARBONS, C3-4 RICH, PETROLEUM DISTILLATE & 2-PROPYLHEPTANOL, ETHOXYLATED & STEARAMIDE DIETHANOLAMIDE</p>	<p>No significant acute toxicological data identified in literature search.</p>
<p>ETHYLENE GLYCOL MONOBUTYL ETHER & DIETHYLENE GLYCOL MONOBUTYL ETHER & COCAMIDE DIETHANOLAMIDE.</p>	<p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p>
<p>ETHYLENE GLYCOL MONOBUTYL ETHER & DIPROPYLENE GLYCOL MONOMETHYL ETHER & COCAMIDE</p>	<p>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.</p>

DIETHANOLAMIDE.	
DIPROPYLENE GLYCOL MONOMETHYL ETHER & COCAMIDE DIETHANOLAMIDE.	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.
STEARAMIDE DIETHANOLAMIDE & COCAMIDE DIETHANOLAMIDE.	Laboratory testing shows that the fatty acid amide, cocoamide DEA, causes occupational allergic contact dermatitis, and that allergy to this substance is becoming more common. Alkanolamides are manufactured by condensation of diethanolamine and the methyl ester of long chain fatty acids. The chemicals in the Fatty Nitrogen Derived (FND) Amides are generally similar in terms of physical and chemical properties, environmental fate and toxicity. Its low acute oral toxicity is well established across all subcategories by the available data and show no apparent organ specific toxicity, mutation, reproductive or developmental defects. Coconut oil diethanolamine condensate is possibly carcinogenic to humans (IARC Group 2B) In a study of the dermal application in mice, coconut oil diethanolamine condensate increased the incidence of hepatocellular carcinoma and hepatocellular adenoma in males and females, and of hepatoblastoma in males. The incidence of renal tubule adenoma and carcinoma combined was also increased in males. In a study of dermal application in rats, no increase in tumour incidence was observed. Tumours of the kidney and hepatoblastoma are rare spontaneous neoplasms in experimental animals. The amide linkage between diethanolamine and of the fatty acid moiety is resistant to metabolic hydrolysis. The carcinogenic effects of the coconut diethanolamine condensate used in the cancer bioassay may be due to the levels of diethanolamine (18.2%) in the solutions tested.

Acute Toxicity	✗	Carcinogenicity	✓
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Wynn's (P) Turbo Cleaner Aerosol	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
solvent naphtha petroleum, heavy aromatic	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	48h	Crustacea	0.95mg/l	1
	EC50	72h	Algae or other aquatic plants	<1mg/l	1
	LC50	96h	Fish	0.58mg/l	2
	EC50	48h	Crustacea	0.95mg/l	1
hydrocarbons, C3-4 rich, petroleum distillate	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	96h	Algae or other aquatic plants	7.71mg/l	2
	LC50	96h	Fish	24.11mg/l	2
ethylene glycol monobutyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	1250mg/l	2
	EC50	72h	Algae or other aquatic plants	623mg/l	2
	EC50	48h	Crustacea	164mg/l	2
	EC10(ECx)	48h	Crustacea	7.2mg/l	2
dipropylene glycol monomethyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>969mg/l	2
	LC50	96h	Fish	>1000mg/l	2
	EC50	48h	Crustacea	1930mg/l	2

	NOEC(ECx)	528h	Crustacea	>=0.5mg/l	2
	EC50	96h	Algae or other aquatic plants	>969mg/l	2
diethylene glycol monobutyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	1300mg/l	2
	EC50	72h	Algae or other aquatic plants	1101mg/l	2
	EC50	48h	Crustacea	>100mg/l	1
	NOEC(ECx)	96h	Algae or other aquatic plants	>=100mg/l	1
	EC50	96h	Algae or other aquatic plants	>100mg/l	1
2-propylheptanol, ethoxylated	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
stearamide diethanolamide	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	96h	Fish	0.3mg/l	2
	LC50	96h	Fish	1.2mg/l	2
	EC50	48h	Crustacea	0.9mg/l	2
cocamide diethanolamide.	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	504h	Crustacea	0.07mg/l	2
	LC50	96h	Fish	2.4mg/l	2
	EC50	48h	Crustacea	~3.2mg/l	2
Legend:	<i>Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data</i>				

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
dipropylene glycol monomethyl ether	HIGH	HIGH
diethylene glycol monobutyl ether	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
solvent naphtha petroleum, heavy aromatic	LOW (BCF = 159)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
dipropylene glycol monomethyl ether	LOW (BCF = 100)
diethylene glycol monobutyl ether	LOW (BCF = 0.46)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (KOC = 1)
dipropylene glycol monomethyl ether	LOW (KOC = 10)
diethylene glycol monobutyl ether	LOW (KOC = 10)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none">▶ 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.
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SECTION 14 Transport information

Labels Required

	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG)

UN number	1950				
UN proper shipping name	AEROSOLS				
Transport hazard class(es)	<table border="1"><tr><td>Class</td><td>2.1</td></tr><tr><td>Subrisk</td><td>Not Applicable</td></tr></table>	Class	2.1	Subrisk	Not Applicable
Class	2.1				
Subrisk	Not Applicable				
Packing group	Not Applicable				
Environmental hazard	Not Applicable				
Special precautions for user	<table border="1"><tr><td>Special provisions</td><td>63 190 277 327 344 381</td></tr><tr><td>Limited quantity</td><td>1000ml</td></tr></table>	Special provisions	63 190 277 327 344 381	Limited quantity	1000ml
Special provisions	63 190 277 327 344 381				
Limited quantity	1000ml				

Air transport (ICAO-IATA / DGR)

UN number	1950														
UN proper shipping name	Aerosols, flammable														
Transport hazard class(es)	<table border="1"><tr><td>ICAO/IATA Class</td><td>2.1</td></tr><tr><td>ICAO / IATA Subrisk</td><td>Not Applicable</td></tr><tr><td>ERG Code</td><td>10L</td></tr></table>	ICAO/IATA Class	2.1	ICAO / IATA Subrisk	Not Applicable	ERG Code	10L								
ICAO/IATA Class	2.1														
ICAO / IATA Subrisk	Not Applicable														
ERG Code	10L														
Packing group	Not Applicable														
Environmental hazard	Not Applicable														
Special precautions for user	<table border="1"><tr><td>Special provisions</td><td>A145 A167 A802</td></tr><tr><td>Cargo Only Packing Instructions</td><td>203</td></tr><tr><td>Cargo Only Maximum Qty / Pack</td><td>150 kg</td></tr><tr><td>Passenger and Cargo Packing Instructions</td><td>203</td></tr><tr><td>Passenger and Cargo Maximum Qty / Pack</td><td>75 kg</td></tr><tr><td>Passenger and Cargo Limited Quantity Packing Instructions</td><td>Y203</td></tr><tr><td>Passenger and Cargo Limited Maximum Qty / Pack</td><td>30 kg G</td></tr></table>	Special provisions	A145 A167 A802	Cargo Only Packing Instructions	203	Cargo Only Maximum Qty / Pack	150 kg	Passenger and Cargo Packing Instructions	203	Passenger and Cargo Maximum Qty / Pack	75 kg	Passenger and Cargo Limited Quantity Packing Instructions	Y203	Passenger and Cargo Limited Maximum Qty / Pack	30 kg G
Special provisions	A145 A167 A802														
Cargo Only Packing Instructions	203														
Cargo Only Maximum Qty / Pack	150 kg														
Passenger and Cargo Packing Instructions	203														
Passenger and Cargo Maximum Qty / Pack	75 kg														
Passenger and Cargo Limited Quantity Packing Instructions	Y203														
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G														

Sea transport (IMDG-Code / GGVSee)

UN number	1950				
UN proper shipping name	AEROSOLS				
Transport hazard class(es)	<table border="1"><tr><td>IMDG Class</td><td>2.1</td></tr><tr><td>IMDG Subrisk</td><td>Not Applicable</td></tr></table>	IMDG Class	2.1	IMDG Subrisk	Not Applicable
IMDG Class	2.1				
IMDG Subrisk	Not Applicable				
Packing group	Not Applicable				
Environmental hazard	Not Applicable				
Special precautions for user	<table border="1"><tr><td>EMS Number</td><td>F-D , S-U</td></tr><tr><td>Special provisions</td><td>63 190 277 327 344 381 959</td></tr></table>	EMS Number	F-D , S-U	Special provisions	63 190 277 327 344 381 959
EMS Number	F-D , S-U				
Special provisions	63 190 277 327 344 381 959				

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
solvent naphtha petroleum, heavy aromatic	Not Available
hydrocarbons, C3-4 rich, petroleum distillate	Not Available
ethylene glycol monobutyl ether	Not Available
dipropylene glycol monomethyl ether	Not Available
diethylene glycol monobutyl ether	Not Available
2-propylheptanol, ethoxylated	Not Available
stearamide diethanolamide	Not Available
cocamide diethanolamide.	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
solvent naphtha petroleum, heavy aromatic	Not Available
hydrocarbons, C3-4 rich, petroleum distillate	Not Available
ethylene glycol monobutyl ether	Not Available
dipropylene glycol monomethyl ether	Not Available
diethylene glycol monobutyl ether	Not Available
2-propylheptanol, ethoxylated	Not Available
stearamide diethanolamide	Not Available
cocamide diethanolamide.	Not Available

SECTION 15 Regulatory information**Safety, health and environmental regulations / legislation specific for the substance or mixture****solvent naphtha petroleum, heavy aromatic is found on the following regulatory lists**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

hydrocarbons, C3-4 rich, petroleum distillate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

ethylene glycol monobutyl ether is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

dipropylene glycol monomethyl ether is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

diethylene glycol monobutyl ether is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

Australian Inventory of Industrial Chemicals (AIIC)

2-propylheptanol, ethoxylated is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

stearamide diethanolamide is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

cocamide diethanolamide. is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	No (2-propylheptanol, ethoxylated)
Canada - NDSL	No (solvent naphtha petroleum, heavy aromatic; hydrocarbons, C3-4 rich, petroleum distillate; ethylene glycol monobutyl ether; dipropylene glycol monomethyl ether; diethylene glycol monobutyl ether; 2-propylheptanol, ethoxylated; stearamide diethanolamide; cocamide diethanolamide.)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (2-propylheptanol, ethoxylated)
Japan - ENCS	No (solvent naphtha petroleum, heavy aromatic; hydrocarbons, C3-4 rich, petroleum distillate; 2-propylheptanol, ethoxylated; stearamide diethanolamide)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (hydrocarbons, C3-4 rich, petroleum distillate; 2-propylheptanol, ethoxylated; stearamide diethanolamide)
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (hydrocarbons, C3-4 rich, petroleum distillate; 2-propylheptanol, ethoxylated; stearamide diethanolamide)
Vietnam - NCI	Yes
Russia - FBEPH	No (hydrocarbons, C3-4 rich, petroleum distillate; 2-propylheptanol, ethoxylated; stearamide diethanolamide)
Legend:	<i>Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)</i>

SECTION 16 Other information

Revision Date	12/03/2020
Initial Date	20/12/2018

SDS Version Summary

Version	Date of Update	Sections Updated
6.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification
7.1.1.1	12/03/2020	Personal Protection (hands/feet)
7.1.2.1	26/04/2021	Regulation Change
7.1.3.1	03/05/2021	Regulation Change
7.1.4.1	06/05/2021	Regulation Change
7.1.5.1	10/05/2021	Regulation Change
7.1.5.2	30/05/2021	Template Change
7.1.5.3	04/06/2021	Template Change
7.1.5.4	05/06/2021	Template Change
7.1.6.4	07/06/2021	Regulation Change

Other information

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.

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.

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