Damar Industries Limited

Version No: 2.3

Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Chemwatch Hazard Alert Code: 4

Issue Date: 20/10/2021 Print Date: 02/05/2022 S.GHS.NZL.EN

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

Product Identifier

Product name	ANDREW WAX AND GREASE REMOVER	
Chemical Name	Not Applicable	
Synonyms	ALE0198; ALK0198	
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains n-heptane and toluene)	
Chemical formula	Not Applicable	
Other means of identification	ALX0098	

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

Relevant identified uses	Clean bare metal prior to painting
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Details of the supplier of the safety data sheet

Registered company name	Damar Industries Limited	
Address	800 Te Ngae Road, Eastgate Park, Rotorua 3042 New Zealand	
Telephone	+64 7 345 6007	
Fax	+64 7 345 6019	
Website	www.damarindustries.com	
Email	info@damarindustries.co.nz	

Emergency telephone number

Association / Organisation	CHEMCALL
Emergency telephone numbers	0800 243 622
Other emergency telephone numbers	1800 127 406 (outside New Zealand)

SECTION 2 Hazards identification

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

ChemWatch Hazard Ratings

	Min	Max	
Flammability	3	i i	
Toxicity	2		
Body Contact	2		0 = Minimum 1 = Low
Reactivity	0		2 = Moderate
Chronic	4		3 = High 4 = Extreme

Classification [1]

Specific Target Organ Toxicity - Repeated Exposure Category 2, Flammable Liquids Category 2, Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Reproductive Toxicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 1, Aspiration Hazard Category 1

Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	3.1B, 6.1D (oral), 6.1E (aspiration), 6.3A, 6.4A, 6.8B, 6.9B, 9.1A	

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H373	May cause damage to organs through prolonged or repeated exposure.	
H225	lighly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H361	Suspected of damaging fertility or the unborn child.	
H410	Very toxic to aquatic life with long lasting effects.	
H304	May be fatal if swallowed and enters airways.	

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P233	Keep container tightly closed.	
P260	Do not breathe mist/vapours/spray.	

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P331	Do NOT induce vomiting.	
P308+P313	IF exposed or concerned: Get medical advice/ attention.	
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.	

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
108-88-3	39-49	toluene
142-82-5	20-45	<u>n-heptane</u>
110-82-7	8-14	cyclohexane

CAS No		%[weight]	Name		
108-87-2		1-5	methylcyclohexane		
111-65-9		1-5	<u>n-octane</u>		
110-54-3 <1		<1	<u>n-hexane</u>		
Legend: 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 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 this product comes in contact with the eyes: Wash out immediately 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: 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	 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, without delay.
Ingestion	 If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. 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. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Following acute or short term repeated exposures to toluene:

- Toluene is absorbed across the alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 degrees C.) The concentration of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm. The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.
- Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24 hr which represents, on average 0.8 gm/gm of creatinine. The biological half-life of hippuric acid is in the order of 1-2 hours.
- Primary threat to life from ingestion and/or inhalation is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (eg cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 <50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- + Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial damage 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 (adrenaline) 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.

BIOLOGICAL EXPOSURE INDEX - BEI

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

Determinant	Index	Sampling Time	Comments
o-Cresol in urine	0.5 mg/L	End of shift	В
Hippuric acid in urine	1.6 g/g creatinine	End of shift	B, NS
Toluene in blood	0.05 mg/L	Prior to last shift of workweek	

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

B: Background levels occur in specimens collected from subjects NOT exposed

SECTION 5 Firefighting measures

Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

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	 Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course.
Fire/Explosion Hazard	 Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. Combustion products include: , carbon dioxide (CO2) , other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. May emit clouds of acrid smoke

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	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 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	The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed
	Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed

	to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur.					
	Containers, even those that have been emptied, may contain explosive vapours.					
	Do NOT cut, drill, grind, weld or perform similar operations on or near containers.					
	Contains low boiling substance:					
	Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.					
	Check for bulging containers.					
	▶ Vent periodically					
	Always release caps or seals slowly to ensure slow dissipation of vapours					
	Electrostatic discharge may be generated during pumping - this may result in fire.					
	Ensure electrical continuity by bonding and grounding (earthing) all equipment.					
	Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe					
	submerged to twice its diameter, then ≤ 7 m/sec).					
	▶ Avoid splash filling.					
	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.					
	Store in original containers in approved flame-proof area.					
	No smoking, naked lights, heat or ignition sources.					
Other information	• DO NOT store in pits, depressions, basements or areas where vapours may be trapped.					
	Keep containers securely sealed.					

Conditions for safe storage, including any incompatibilities

Suitable container	 Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks. For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23 deg. C) For manufactured product having a viscosity of at least 250 cSt.
Storage incompatibility	 Toluene: reacts violently with strong oxidisers, bromine, bromine trifluoride, chlorine, hydrochloric acid/ sulfuric acid mixture, 1,3-dichloro-5,5-dimethyl-2,4-imidazolidindione, dinitrogen tetraoxide, fluorine, concentrated nitric acid, nitrogen dioxide, silver chloride, sulfur dichloride, uranium fluoride, vinyl acetate forms explosive mixtures with strong acids, strong oxidisers, silver perchlorate, tetranitromethane is incompatible with bis-toluenediazo oxide attacks some plastics, rubber and coatings may generate electrostatic charges, due to low conductivity, on flow or agitation. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids. Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides. Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Aromatics can react exothermically with bases and with diazo compounds. Cyclohexane reacts violently with strong oxidisers, nitrogen tetraoxide may generate e

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene (Toluol)	50 ppm / 188 mg/m3	Not Available	Not Available	(skin)-Skin absorption
New Zealand Workplace Exposure Standards (WES)	n-heptane	Heptane (n-Heptane)	400 ppm / 1640 mg/m3	2050 mg/m3 / 500 ppm	Not Available	Not Available

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	cyclohexane	Cyclohexane	100 ppm / 350 mg/m3	1050 mg/m3 / 300 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	methylcyclohexane	Methylcyclohexane	400 ppm / 1610 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-octane	Octane	300 ppm / 1400 mg/m3	1750 mg/m3 / 375 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-hexane	Hexane (n-Hexane)	20 ppm / 72 mg/m3	Not Available	Not Available	(bio)-Exposure can also be estimated by biological monitoring.

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
toluene	Not Available	Not Available	Not Available
n-heptane	500 ppm	830 ppm	5000* ppm
cyclohexane	300 ppm	1700* ppm	10000** ppm
methylcyclohexane	1200* ppm	1700* ppm	10000** ppm
n-octane	230 ppm	385 ppm	5000** ppm
n-hexane	260 ppm	Not Available	Not Available
Ingradiant	Original IDL H	Deviced	

Ingredient	Original IDLH	Revised IDLH
toluene	500 ppm	Not Available
n-heptane	750 ppm	Not Available
cyclohexane	1,300 ppm	Not Available
methylcyclohexane	1,200 ppm	Not Available
n-octane	1,000 ppm	Not Available
n-hexane	1,100 ppm	Not Available

Exposure controls

Appropriate engineering controls	CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear 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: 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.	
Personal protection		
Eye and face protection	 Safety glasses with side shields. 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 lenses or restrictions on use, should be created for each workplace or task. 	
Skin protection	See Hand protection below	
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber Neoprene rubber gloves 	
Body protection	See Other protection below	
Other protection	 Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Some plastic personal protective equipment (PPE) (e.g. gloves aprops overshoes) are not recommended as they may 	

Recommended material(s)

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:

ANDREW WAX AND GREASE REMOVER

Material	CPI
BUTYL	С
BUTYL/NEOPRENE	С
CPE	С
HYPALON	С
NATURAL RUBBER	С
NEOPRENE	C
NEOPRENE/NATURAL	С
NITRILE	C
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	C
PVC	С
SARANEX-23	С
SARANEX-23 2-PLY	C
TEFLON	С
VITON	С
VITON/CHLOROBUTYL	С
VITON/NEOPRENE	С

* 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.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear colourless highly flammable liquid		
		Relative density (Water =	
Physical state	Liquid	1)	0.786
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	258
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)	88-104	Molecular weight (g/mol)	Not Available
Flash point (°C)	-13	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available

Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS	-	A-PAPR-AUS / Class 1
up to 50 x ES	-	A-AUS / Class 1	-
up to 100 x ES	-	A-2	A-PAPR-2 ^

^ - 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)

Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	7	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. 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	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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 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. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Inhalation, by humans, of 1000 parts per million (0.1%) heptanes for 6 minutes was associated with slight dizziness; inhalation of higher concentrations for shorter periods, resulted in vertigo and inco-ordination, and hilarity. Central nervous system involvement occurs very early, even before mucous membrane irritation. Animal testing showed exposure to 1.5-2% for 30 minutes may be fatal. Brief exposure (4 minutes) to 0.5% caused nausea, loss of appetite, and a "gasoline taste" that persisted for several hours after exposure ended. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse. Rabbits survived 8 hour exposures to cyclohexane at 18500 ppm but 26600 ppm was lethal after 1 hour exposure. A concentration of 12600 ppm produced severe weakness, unconsciousness, increased breathing and convulsions while 3330 ppm failed to e
Ingestion	At sufficiently high doses the material may be hepatotoxic (i.e. poisonous to the liver). Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
Skin Contact	The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. 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. The material may cause moderate 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. Prolonged or repeated contact with n-heptane may cause irritation and skin inflammation with reddening and swelling.
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. 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.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence exists that this material directly causes reduced fertility Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Intentional abuse (glue sniffing) or occupational exposure to toluene can result in chronic habituation. Chronic abuse has caused inco-ordination, tremors of the extremeties (due to widespread cerebrum withering), headache, abnormal speech, temporary memory loss, convulsions, coma, drowsiness, reduced colour perception, blindness, nystagmus (rapid, involuntary eye movements), hearing loss leading to deafness and mild dementia. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Chronic inhalation or skin exposure to n-hexane may cause damage to nerve ends in extremities, e.g. finger, toes with loss of sensation. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

ANDREW WAX AND	ΤΟΧΙCΙΤΥ	IRRITATION	
GREASE REMOVER	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: 12124 mg/kg ^[2]	Eye (rabbit): 2mg/24h - SEVERE	
	Inhalation(Rat) LC50; >13350 ppm4h ^[2]	Eye (rabbit):0.87 mg - mild	
	Oral (Rat) LD50; 636 mg/kg ^[2]	Eye (rabbit):100 mg/30sec - mild	
toluene		Eye: adverse effect observed (irritating) ^[1]	
		Skin (rabbit):20 mg/24h-moderate	
		Skin (rabbit):500 mg - moderate	
		Skin: adverse effect observed (irritating) ^[1]	
		Skin: no adverse effect observed (not irritating) ^[1]	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
n-heptane	Inhalation(Rat) LC50; >29.29 mg/l4h ^[1]	Skin: no adverse effect observed (not irritating) ^[1]	
	Oral (Rat) LD50; >5000 mg/kg ^[1]		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
cyclohexane	Inhalation(Rat) LC50; >5540 ppm4h ^[1]	Skin(rabbit): 1548 mg/48hr - mild	
	Oral (Rat) LD50; 12705 mg/kg ^[2]	Skin: adverse effect observed (irritating) ^[1]	
		Skin: no adverse effect observed (not irritating) ^[1]	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available	
methylcyclohexane	Inhalation(Dog) LC50; >4.075 mg/l4h ^[1]		
	Oral (Mouse) LD50; 2250 mg/kg ^[2]		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
n-octane	Inhalation(Rat) LC50; >24.88 mg/l4h ^[1]	Skin: no adverse effect observed (not irritating) ^[1]	
	Oral (Rat) LD50; >5000 mg/kg ^[1]		

	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye(rabbit): 10 mg - mild
n-hexane	Inhalation(Rat) LC50; 48000 ppm4h ^[2]	
	Oral (Rat) LD50; 28710 mg/kg ^[2]	
Legend:	 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 	

	Asthma-like symptoms may continue for months non-allergic condition known as reactive airways	, ,	•
ANDREW WAX AND GREASE REMOVER	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. Data demonstrate that during inhalation exposure, aromatic hydrocarbons undergo substantial partitioning into adipose tissues. Following cessation of exposure, the level of aromatic hydrocarbons in body fats rapidly declines. Thus, the aromatic hydrocarbons are unlikely to bioaccumulate in the body. Selective partitioning of the aromatic hydrocarbons into the non-adipose tissues is unlikely.		
TOLUENE	The material may cause skin irritation after prolo the production of vesicles, scaling and thickenin	• • •	may produce on contact skin redness, swelling,
CYCLOHEXANE	Bacteria mutagen		
N-OCTANE	Oral (rat) LD50: 5630 mg/kg* [CCINFO] Nil repo	rted	
N-HEXANE	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.		
ANDREW WAX AND GREASE REMOVER & TOLUENE	For toluene: Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system depression, and in large doses has a narcotic effect. 60mL has caused death. Death of heart muscle fibres, liver swelling, congestion and bleeding of the lungs and kidney injury were all found on autopsy. Exposure to inhalation at a concentration of 600 parts per million for 8 hours resulted in the same and more serious symptoms including euphoria (a feeling of well-being), dilated pupils, convulsions and nausea.		
Acute Toxicity	✓ Carcinogenicity ×		
Skin Irritation/Corrosion	¥	Reproductivity	✓
Serious Eye Damage/Irritation	~	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	•
Mutagenicity	×	Aspiration Hazard	¥

SECTION 12 Ecological information

ity					
	Endpoint	Test Duration (hr)	Species	Value	Source
ANDREW WAX AND GREASE REMOVER	Not Available	Not Available	Not Available	Not Available	Not Available
toluene	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	168h	Crustacea	0.74mg/L	5
	LC50	96h	Fish	5-35mg/l	4
	EC50	48h	Crustacea	3.78mg/L	5
	EC50	96h	Algae or other aquatic plants	>376.71mg/L	4
n-heptane	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	504h	Crustacea	0.17mg/l	2
	LC50	96h	Fish	3446.8mg/L	4

Legend:

X - Data either not available or does not fill the criteria for classification

Data available to make classification

	EC50	48h		Crustacea		0.64mg/l	2
	Endpoint	Test Duration (hr)		Species		Value	Source
	EC50(ECx)	48h		Crustacea		0.9mg/l	2
	BCF	1344h		Fish		31-102	7
cyclohexane	EC50	72h		Algae or other aquatic plants	Algae or other aquatic plants		2
	LC50	96h		Fish		4.53mg/l	2
	EC50	48h		Crustacea		0.9mg/l	2
	EC50	96h		Algae or other aquatic plants	6	2.17mg/l	2
	Endpoint	Test Duration (hr)		Species		Value	Source
	NOEC(ECx)	72h		Algae or other aquatic plants		0.022mg/l	2
	BCF	1344h		Fish		95-321	7
methylcyclohexane	LC50	96h		Fish		2.07mg/l	2
	EC50	72h		Algae or other aquatic plant	s	0.134mg/l	2
	EC50	48h		Crustacea		0.326mg/l	2
	Endpoint	Test Duration (hr)		Species		Value	Source
n-octane	NOEC(ECx)	504h		Crustacea		0.17mg/l	2
	EC50	48h		Crustacea		0.3mg/l	2
	Endpoint	Test Duration (hr)	Sp	ecies	Value		Source
n-hexane	EC50(ECx)	240h	Alg	ae or other aquatic plants	25.023-	137.802mg/L	4
Legend:	4. US EPA, Eco	1. IUCLID Toxicity Data 2. Euro tox database - Aquatic Toxicity n Data 7. METI (Japan) - Bioco	Data 5. ECE	TOC Aquatic Hazard Assess	°.		tic Toxicity

Very toxic to aquatic organisms.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the

oxygen transfer between the air and the water

Oils of any kind can cause:

- + drowning of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility
- Iethal effects on fish by coating gill surfaces, preventing respiration

* asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and

adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs. Atmospheric Fate: PAHs are 'semi-volatile substances'' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus.

For n-Heptane: Log Kow: 4.66; Koc: 2400-8100; Half-life (hr) Air: 52.8; Half-life (hr) Surface Water: 2.9-312; Henry's atm m3 /mol: 2.06; BOD 5 (if unstated): 1.92; COD: 0.06; BCF: 340-2000; Log BCF: 2.53-3.31.

Atmospheric Fate: Breakdown of n-heptane by sunlight is not expected to be an important fate process. If released to the atmosphere, n-heptane is expected to exist entirely in the vapor phase, in ambient air. Reactions hydroxyl radicals in the atmosphere have been shown to be important.

For n-Hexane: Log Kow: 3.17-3.94; Henry s Law Constant: 1.69 atm-m3 mol; Vapor Pressure: 150 mm Hg @ 25 C; Log Koc: 2.90 to 3.61. BOD 5, (if unstated): 2.21; COD: 0.04; ThOD: 3.52.

Atmospheric Fate: n-Hexane is not expected to be directly broken down by sunlight. The main atmospheric removal mechanism is through reactions with hydroxyl radicals, with an approximant half-life of 2.9 days.

For Cyclohexanes: log Kow: 3.44; Water Solubility: 54.8 mg/L (25 C); Vapor Pressure: 97.6 mm Hg (25 C); Henry s Law Constant: 0.193 atm-m3/mole; Koc: 480; Half-life (hr) air: 6-52; Half-life (hr) H2O surface water: 2; ThOD: 3.42. BCF: 242.

Atmospheric Fate: In the atmosphere, cyclohexane will degrade by reaction with photochemically produced hydroxyl radicals (half-life 52 hours). Photodegradation occurs in about 6 hours in the presence of nitrogen oxides (photochemical smog conditions).

For Toluene:

log Kow : 2.1-3; log Koc : 1.12-2.85; Koc : 37-260;

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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 m3 /mol : 518-694; Henry's atm m3 /mol : 5.94; E-03BOD 5 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.

Atmospheric Fate: The majority of toluene evaporates to the atmosphere from the water and soil. The main degradation pathway for toluene in the atmosphere is reaction with photochemically produced hydroxyl radicals. The estimated atmospheric half life for toluene is about 13 hours.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air	
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)	
n-heptane	LOW	LOW	
cyclohexane	HIGH (Half-life = 360 days)	LOW (Half-life = 3.63 days)	
methylcyclohexane	LOW	LOW	
n-octane	LOW	LOW	
n-hexane	LOW	LOW	

Bioaccumulative potential

Ingredient	Bioaccumulation
toluene	LOW (BCF = 90)
n-heptane	HIGH (LogKOW = 4.66)
cyclohexane	LOW (BCF = 242)
methylcyclohexane	LOW (BCF = 321)
n-octane	HIGH (LogKOW = 5.18)
n-hexane	MEDIUM (LogKOW = 3.9)

Mobility in soil

Ingredient	Mobility
toluene	LOW (KOC = 268)
n-heptane	LOW (KOC = 274.7)
cyclohexane	LOW (KOC = 165.5)
methylcyclohexane	LOW (KOC = 268)
n-octane	LOW (KOC = 506.7)
n-hexane	LOW (KOC = 149)

SECTION 13 Disposal considerations

	Containers may still present a chemical hazard/ danger when empty.
	Return to supplier for reuse/ recycling if possible.
	Otherwise:
	If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to
	store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
	Where possible retain label warnings and SDS and observe all notices pertaining to the product.
Product / Packaging	• DO NOT allow wash water from cleaning or process equipment to enter drains.
disposal	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.
	Recycle wherever possible.
	 Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suita treatment or disposal facility can be identified.
	Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in

 licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers. 	
 Decontaminate empty containers. 	licensed apparatus (after admixture with suitable combustible material).
	Decontaminate empty containers.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

SECTION 14 Transport information

Labels Required

Marine Pollutant	
HAZCHEM	•3YE

Land transport (UN)

UN number	1993			
UN proper shipping name	FLAMMABI	LAMMABLE LIQUID, N.O.S. (contains n-heptane and toluene)		
Transport hazard class(es)	Class Subrisk	3 Not Appl	icable	
Packing group	II	1		
Environmental hazard	Environmer	Environmentally hazardous		
Special precautions for user	Special p Limited qu		274 1 L	

Air transport (ICAO-IATA / DGR)

UN number	1993				
UN proper shipping name	Flammable liquid, n.o.s.	* (contains n-heptane and toluene)			
	ICAO/IATA Class	3			
Transport hazard class(es)	ICAO / IATA Subrisk	Not Applicable			
	ERG Code	ЗН			
Packing group	Ш				
Environmental hazard	Environmentally hazardous				
Special precautions for user	Special provisions		A3		
	Cargo Only Packing Ir	nstructions	364		
	Cargo Only Maximum	Qty / Pack	60 L		
	Passenger and Cargo	Packing Instructions	353		
	Passenger and Cargo	Maximum Qty / Pack	5 L		
	Passenger and Cargo	Limited Quantity Packing Instructions	Y341		
	Passenger and Cargo Limited Maximum Qty / Pack		1 L		

UN number	1993	1993				
UN proper shipping name	FLAMMABLE LIQUID	AMMABLE LIQUID, N.O.S. (contains n-heptane and toluene)				
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk N	lot Applicable				
Packing group	Ш					
Environmental hazard	Marine Pollutant					
Special precautions for user	EMS Number Special provisions Limited Quantities	F-E, S-E 274 1 L				

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
toluene	Not Available
n-heptane	Not Available
cyclohexane	Not Available
methylcyclohexane	Not Available
n-octane	Not Available
n-hexane	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
toluene	Not Available
n-heptane	Not Available
cyclohexane	Not Available
methylcyclohexane	Not Available
n-octane	Not Available
n-hexane	Not Available

SECTION 15 Regulatory information

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002662	Surface Coatings and Colourants Flammable Group Standard 2020

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

toluene is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act -Classification of Chemicals

n-heptane is found on the following regulatory lists

New Zealand Approved Hazardous Substances with controls New Zealand Hazardous Substances and New Organisms (HSNO) Act -

Classification of Chemicals New Zealand Hazardous Substances and New Organisms (HSNO) Act -

Classification of Chemicals - Classification Data

New Zealand Hazardous Substances and New Organisms (HSNO) Act -Classification of Chemicals - Classification Data New Zealand Inventory of Chemicals (NZIoC) New Zealand Workplace Exposure Standards (WES)

New Zealand Inventory of Chemicals (NZIoC) New Zealand Workplace Exposure Standards (WES)

cyclohexane is found on the following regulatory lists		
New Zealand Approved Hazardous Substances with controls	New Zealand Inventory of Chemicals (NZIoC)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals	New Zealand Workplace Exposure Standards (WES)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data		
methylcyclohexane is found on the following regulatory lists		
New Zealand Approved Hazardous Substances with controls	New Zealand Inventory of Chemicals (NZIoC)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals	New Zealand Workplace Exposure Standards (WES)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data		
n-octane is found on the following regulatory lists		
New Zealand Approved Hazardous Substances with controls	New Zealand Inventory of Chemicals (NZIoC)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals	New Zealand Workplace Exposure Standards (WES)	
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data		
n-hexane is found on the following regulatory lists		
Chemical Footprint Project - Chemicals of High Concern List	New Zealand Hazardous Substances and New Organisms (HSNO) Act -	
New Zealand Approved Hazardous Substances with controls	Classification of Chemicals - Classification Data	
New Zealand Hazardous Substances and New Organisms (HSNO) Act -	New Zealand Inventory of Chemicals (NZIoC)	
Classification of Chemicals	New Zealand Workplace Exposure Standards (WES)	

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
3.1B	100 L in containers more than 5 L	50 L
3.1B	250 L in containers up to and including 5 L	50 L

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)	Maximum quantity per package for each classification
3.1B				1 L

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (toluene; n-heptane; cyclohexane; methylcyclohexane; n-octane; n-hexane)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes

National Inventory	Status
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	No (methylcyclohexane)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	20/10/2021
Initial Date	08/10/2021

SDS Version Summary

Version	Date of Update	Sections Updated
1.3	20/10/2021	Ingredients, Synonyms

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.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average
PC-STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
AIIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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