## **Resene Automotive & Light Industrial**

Version No: 3.4

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

Issue Date: 01/02/2024 Print Date: 01/02/2024 L.GHS.NZL.EN

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

Product Identifier		
Product name	RESENE REDUCER 400 NORMAL	
Synonyms	Not Available	
Proper shipping name	PAINT RELATED MATERIAL (including paint thinning or reducing compound); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	
Other means of identification	Not Available	

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

Relevant identified uses 9882

## Details of the manufacturer or supplier of the safety data sheet

Registered company name	Resene Automotive & Light Industrial	
Address	50 Vogel Street Wellington Naenae 5011 New Zealand	
Telephone	+64 4 577 0500	
Fax	+64 9 259 2737	
Website	http://reseneauto.co.nz/	
Email	accounts@reseneauto.co.nz	

## Emergency telephone number

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Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone numbers	0800 764766	+64 800 700 112
Other emergency telephone numbers	0800 737363	+61 3 9573 3188

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

Classification <sup>[1]</sup>	Flammable Liquids Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 4	
Legend:	1. Classified by Chernwatch; 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 (dermal), 6.1D (oral), 6.3A, 6.4A, 6.8B, 6.9B, 9.1D	

#### Label elements

Hazard pictogram(s)	
Signal word	Danger

## Hazard statement(s)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure. (Dermal, Inhalation)

H413 May cause long lasting harmful effects to aquatic life.

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.	
P280	Wear protective gloves, protective clothing, eye protection and face protection.	
P240	Ground and bond container and receiving equipment.	
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.	
P242	Use non-sparking tools.	
P243	Take action to prevent static discharges.	
P264	Wash all exposed external body areas thoroughly after handling.	
P270	Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.	

## Precautionary statement(s) Response

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.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.	
P302+P352	IF ON SKIN: Wash with plenty of water and soap.	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	
P330	Rinse mouth.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	

#### Precautionary statement(s) Storage

r recontionary statement(s) otorage	
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.

## **SECTION 3 Composition / information on ingredients**

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
1330-20-7	20-50	xylene
108-88-3	20-50	toluene
123-86-4	1-10	n-butyl acetate
108-65-6	1-10	propylene glycol monomethyl ether acetate, alpha-isomer
Legend:		h; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; n C&L * EU IOELVs available

## **SECTION 4 First aid measures**

## Description of first aid measures

•		
Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>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.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>	
Skin Contact	If skin contact occurs: <ul> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>	

Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>
Ingestion	<ul> <li>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> </ul>

#### 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. for simple esters:

#### BASIC TREATMENT

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

## ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- + Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.

Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

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):

Index	Sampling Time	Comments
0.5 mg/L	End of shift	В
1.6 g/g creatinine	End of shift	B, NS
0.05 mg/L	Prior to last shift of workweek	
	0.5 mg/L 1.6 g/g creatinine	0.5 mg/L     End of shift       1.6 g/g creatinine     End of shift

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

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

For acute or short term repeated exposures to xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from 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

Comments

## **RESENE REDUCER 400 NORMAL**

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 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.
- 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
Methylhippu-ric acids in urine	1.5 gm/gm creatinine	End of shift
	2 mg/min	Last 4 hrs of shift

## **SECTION 5 Firefighting measures**

## Extinguishing media

Alcohol stable foam.

#### 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

### Advice for firefighters

0	
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	<ul> <li>Liquid and vapour are highly flammable.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> <li>other pyrolysis products typical of burning organic material.</li> <li>Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.</li> </ul>

### **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.
Major Spills	Chemical Class: ester and ethers For release onto land: recommended sorbents listed in order of priority. Clear area of personnel and move upwind.

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

## **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Containers, even those that have been emptied, may contain explosive vapours.</li> <li>Contains low boiling substance:</li> <li>Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.</li> <li>Electrostatic discharge may be generated during pumping - this may result in fire.</li> <li>Avoid all personal contact, including inhalation.</li> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> </ul>
Other information	Store in original containers in approved flame-proof area.

#### Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Packing as supplied by manufacturer.</li> <li>For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type.</li> </ul>
Storage incompatibility	<ul> <li>Toluene:</li> <li>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</li> <li>forms explosive mixtures with strong acids, strong oxidisers, silver perchlorate, tetranitromethane</li> <li>is incompatible with bis-toluenediazo oxide</li> <li>attacks some plastics, rubber and coatings</li> <li>may generate electrostatic charges, due to low conductivity, on flow or agitation.</li> </ul>

Χv	lenes:	
Λy	ienes.	

- ▶ may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride
- attack some plastics, rubber and coatings
- may generate electrostatic charges on flow or agitation due to low conductivity.
  Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.
- For alkyl aromatics:
- The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms.
- Esters react with acids to liberate heat along with alcohols and acids.

#### **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)	xylene	Dimethylbenzene	50 ppm / 217 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene (Toluol)	20 ppm / 75 mg/m3	377 mg/m3 / 100 ppm	Not Available	(skin) - Skin absorption oto - Ototoxin (bio) - Exposure can also be estimated by biological monitoring
New Zealand Workplace Exposure Standards (WES)	n-butyl acetate	n-Butyl acetate	150 ppm / 713 mg/m3	950 mg/m3 / 200 ppm	Not Available	Not Available

#### Emergency Limits

Ingredient	TEEL-1 TEEL-2			TEEL-3
xylene	Not Available	Not Available		Not Available
toluene	Not Available	Not Available		Not Available
n-butyl acetate	Not Available	Not Available		Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
xylene	900 ppm		Not Available	
toluene	500 ppm		Not Available	
n-butyl acetate	1,700 ppm		Not Available	
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available		Not Available	

#### MATERIAL DATA

IFRA Prohibited Fragrance Substance

The International Fragrance Association (IFRA) Standards form the basis for the globally accepted and recognized risk management system for the safe use of fragrance ingredients and are part of the IFRA Code of Practice.

These exposure guidelines have been derived from a screening level of risk assessment and should not be construed as unequivocally safe limits.

Exposed individuals are NOT reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

#### For n-butyl acetate

Odour Threshold Value: 0.0063 ppm (detection), 0.038-12 ppm (recognition)

Exposure at or below the recommended TLV-TWA is thought to prevent significant irritation of the eyes and respiratory passages as well as narcotic effects.

for xylenes:

IDLH Level: 900 ppm

Odour Threshold Value: 20 ppm (detection), 40 ppm (recognition)

NOTE: Detector tubes for o-xylene, measuring in excess of 10 ppm, are available commercially.

For toluene:

Odour Threshold Value: 0.16-6.7 (detection), 1.9-69 (recognition)

NOTE: Detector tubes measuring in excess of 5 ppm, are available.

## Exposure controls

Appropriate engineering controls	<b>CARE:</b> 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.	
Individual protection measures, such as personal protective equipment		
Eye and face protection	Safety glasses with side shields.	
Skin protection	See Hand protection below	
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>For esters:</li> <li>Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials.</li> <li>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.</li> </ul>	

Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li> </ul>

## **Respiratory protection**

Respiratory protection required in insufficiently ventilated working areas and during spraying. An approved respirator with a replaceable vapour/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to AS/NZS 1715 Standard, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716 Standard, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances. Recommended filter type: Type A filter (organic vapour).

## **SECTION 9** Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Colourless clear liquid with strong solvent odour		
Physical state	Liquid	Relative density (Water = 1)	0.87-0.88
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	97	Molecular weight (g/mol)	Not Available
Flash point (°C)	15	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	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)	100
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	876

## **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.
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	Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. Inhalation of vapours may cause drowsiness and dizziness. The main effects of simple aliphatic esters are narcosis and irritation and anaesthesia at higher concentrations. Inhalation hazard is increased at higher temperatures. Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination Central nervous system (CNS) depression may include nonspecific discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression.
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	Headache, fatigue, lassitude, irritability and gastrointestinal disturbances of xylene overexposure. Xylene is a central nervous system depressant. Inhalation of aerosols (mists, fumes), generated by the material during th		
Ingestion	The material is not thought to produce adverse health effects following in At sufficiently high doses the material may be hepatotoxic (i.e. poisonous Swallowing of the liquid may cause aspiration of vomit into the lungs with pneumonitis; serious consequences may result. Considered an unlikely route of entry in commercial/industrial environmen may be harmful or toxic if swallowed.	to the liver). the risk of haemorrhaging, pulmonary oedema, progressing to chemical	
Skin Contact	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, punctu Skin contact with the material may be harmful; systemic effects may resu The material produces moderate skin irritation; evidence exists, or practin produces moderate inflammation of the skin in a substantial number produces significant, but moderate, inflammation when applied to the being present twenty-four hours or more after the end of the exposure	Ire wounds or lesions, may produce systemic injury with harmful effects. It following absorption. cal experience predicts, that the material either of individuals following direct contact, and/or e healthy intact skin of animals (for up to four hours), such inflammation	
Eye	The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.		
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be caused by repeated or prolonged exposure. There is sufficient evidence to establish a causal relationship between human exposure to the material and impaired fertility Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Chronic toluene habituation occurs following intentional abuse (glue sniffing) or from occupational exposure. On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Prolonged or repeated contact with xylenes may cause defatting dermatitis with drying and cracking. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.		
RESENE REDUCER 400	ΤΟΧΙΟΙΤΥ	IRRITATION	

<b>RESENE REDUCER 400</b>	TOXICITY	IRRITATION	
NORMAL	Not Available	Not Available	
	ΤΟΧΙCΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >1700 mg/kg <sup>[2]</sup>	Eye (human): 200 ppm irritant	
	Inhalation(Rat) LC50: 5000 ppm4h <sup>[2]</sup>	Eye (rabbit): 5 mg/24h SEVERE	
xylene	Oral (Mouse) LD50; 2119 mg/kg <sup>[2]</sup>	Eye (rabbit): 87 mg mild	
		Eye: adverse effect observed (irritating) <sup>[1]</sup>	
		Skin (rabbit):500 mg/24h moderate	
		Skin: adverse effect observed (irritating) <sup>[1]</sup>	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: 12124 mg/kg <sup>[2]</sup>	Eye (rabbit): 2mg/24h - SEVERE	
	Inhalation(Rat) LC50: >13350 ppm4h <sup>[2]</sup>	Eye (rabbit):0.87 mg - mild	
	Oral (Rat) LD50: 636 mg/kg <sup>[2]</sup>	Eye (rabbit):100 mg/30sec - mild	
toluene	Eye: adverse effect observed (irritating) <sup>[1]</sup>		
		Skin (rabbit):20 mg/24h-moderate	
		Skin (rabbit):500 mg - moderate	
		Skin: adverse effect observed (irritating) <sup>[1]</sup>	
		Skin: no adverse effect observed (not irritating) <sup>[1]</sup>	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: 3200 mg/kg <sup>[2]</sup>	Eye ( human): 300 mg * [PPG]	
	Inhalation(Rat) LC50: 0.74 mg/l4h <sup>[2]</sup>	Eye (rabbit): 20 mg (open)-SEVERE	
n-butyl acetate	Oral (Rabbit) LD50; 3200 mg/kg <sup>[2]</sup>	Eye (rabbit): 20 mg/24h - moderate	
		Eye: no adverse effect observed (not irritating) <sup>[1]</sup>	
		Skin (rabbit): 500 mg/24h-moderate	
		Skin: no adverse effect observed (not irritating) <sup>[1]</sup>	

	ΤΟΧΙCITY	IRRITATION	
propylene glycol monomethyl ether acetate, alpha-isomer	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observ	ved (not irritating) <sup>[1]</sup>
	Oral (Rat) LD50: 3739 mg/kg <sup>[2]</sup>	Skin: no adverse effect obser	ved (not irritating) <sup>[1]</sup>
Legend:	1. Value obtained from Europe ECHA Registered specified data extracted from RTECS - Register of	•	ined from manufacturer's SDS. Unless otherwise
RESENE REDUCER 400 NORMAL	Asthma-like symptoms may continue for months o Data demonstrate that during inhalation exposure,		
XYLENE	Reproductive effector in rats The substance is classified by IARC as Group 3: <b>NOT</b> classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.		
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER	rabbits; but exposure to 145 ppm and 36 ppm had material, the remaining 90% is alpha isomer. *Shin for propylene glycol ethers (PGEs):	no adverse effects. The beta isomer of F n-Etsu SDS glycol n-butyl ether (PnB); dipropylene gl	omer) was associated with a teratogenic response in PGMEA comprises only 10% of the commercial ycol n-butyl ether (DPnB); dipropylene glycol methyl
		Testing of a wide variety of propylene gl	ycol ethers has shown that propylene glycol-based
RESENE REDUCER 400 NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle	: Testing of a wide variety of propylene gl ene series.	
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity	Ensign of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier	
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of	<ul> <li>Testing of a wide variety of propylene gl ene series.</li> <li>re hydrolysed to their component alcohol</li> <li>toluene for short periods of time experier psis, and death.</li> </ul>	s and carboxylic acids in the intestinal tract, blood ar
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of from headaches to intoxication, convulsions, narco	Testing of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier osis, and death. aye causing pronounced inflammation.	s and carboxylic acids in the intestinal tract, blood ar
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE XYLENE & N-BUTYL ACETATE XYLENE & TOLUENE &	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of from headaches to intoxication, convulsions, narco The material may produce severe irritation to the e	Testing of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier osis, and death. aye causing pronounced inflammation.	s and carboxylic acids in the intestinal tract, blood ar
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE YLENE & N-BUTYL ACETATE XYLENE & TOLUENE & N-BUTYL ACETATE	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of from headaches to intoxication, convulsions, narco The material may produce severe irritation to the e The material may cause skin irritation after prolong	E Testing of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier usis, and death. eye causing pronounced inflammation. ged or repeated exposure and may produ	s and carboxylic acids in the intestinal tract, blood an ice adverse central nervous system effects ranging ice a contact dermatitis (nonallergic).
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE (YLENE & N-BUTYL ACETATE XYLENE & TOLUENE & N-BUTYL ACETATE Acute Toxicity Skin Irritation/Corrosion	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of from headaches to intoxication, convulsions, narco The material may produce severe irritation to the e The material may cause skin irritation after prolong	E Testing of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier prise, and death. eye causing pronounced inflammation. ged or repeated exposure and may produ Carcinogenicity	s and carboxylic acids in the intestinal tract, blood an ince adverse central nervous system effects ranging ince a contact dermatitis (nonallergic).
NORMAL & N-BUTYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA- ISOMER RESENE REDUCER 400 NORMAL & TOLUENE XYLENE & N-BUTYL ACETATE XYLENE & TOLUENE & N-BUTYL ACETATE Acute Toxicity	Testing of a wide variety of propylene glycol ethers ethers are less toxic than some ethers of the ethyle Generally,linear and branched-chain alkyl esters a most tissues throughout the body. For toluene: Acute Toxicity Humans exposed to intermediate to high levels of from headaches to intoxication, convulsions, narco The material may produce severe irritation to the e The material may cause skin irritation after prolong	s Testing of a wide variety of propylene gl ene series. re hydrolysed to their component alcohol toluene for short periods of time experier sis, and death. eye causing pronounced inflammation. ged or repeated exposure and may produ Carcinogenicity Reproductivity	s and carboxylic acids in the intestinal tract, blood ar nce adverse central nervous system effects ranging nce a contact dermatitis (nonallergic).

Data either not available or does not
 Data available to make classification

## **SECTION 12 Ecological information**

Toxicity

RESENE REDUCER 400 NORMAL	Endpoint	Test Duration (hr)	Species	Value	Sour	ce
	Not Available	Not Available	Not Available	Not Available	Not A	vailable
	Endpoint	Test Duration (hr)	Species		Value	Source
	EC50	72h	Algae or other aquatic pla	ints	4.6mg/l	2
xylene	EC50	48h	Crustacea		1.8mg/l	2
	LC50	96h	Fish		2.6mg/l	2
	NOEC(ECx)	73h	Algae or other aquatic pla	ants	0.44mg/l	2
	Endpoint	Test Duration (hr)	Species	Va	lue	Source
	EC50	96h	Algae or other aquatic plants	s >3	76.71mg/L	4
	EC50	72h	Algae or other aquatic plants	s 12	.5mg/l	4
toluene	EC50	48h	Crustacea	3.7	78mg/L	5
	LC50	96h	Fish	5-3	35mg/l	4
	NOEC(ECx)	168h	Crustacea	0.7	74mg/L	5

	EC50	72h	Algae or other aquatic plants	246mg/l	2
	EC50	48h	Crustacea	32mg/l	1
	LC50	96h	Fish	17-19mg/l	4
	EC50(ECx)	96h	Fish	18mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
propylene glycol monomethyl	EC50	96h	Algae or other aquatic plants	>1000mg/l	2
	EC50	72h	Algae or other aquatic plants	>1000mg/l	2
propylene glycol monomethyl	L030				
oropylene glycol monomethyl ether acetate, alpha-isomer	EC50	48h	Crustacea	373mg/l	2
propylene glycol monomethyl ether acetate, alpha-isomer		48h 96h	Crustacea Fish	373mg/l 100mg/l	2

- Bioconcentration Data 8. Vendor Data

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

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

For Xylenes: log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m3 /mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

For Toluene: Iog Kow : 2.1-3; Iog Kow : 2.1-3; Iog Koc : 1.12-2.85; Koc : 37-260; Iog Kom : 1.39-2.89; Half-life (hr) H2O surface water : 5.55-528; Half-life (hr) H2O ground : 168-2628; Half-life (hr) H2O ground : 168-2628; Half-life (hr) H2O ground : 168-2628; Half-life (hr) soil : <48-240; Henry's Pa m3 /mol : 518-694; Henry's Pa 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; Iog BCF - 0.22-3.28. **DO NOT** discharge into sewer or waterways.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)
n-butyl acetate	LOW	LOW
propylene glycol monomethyl ether acetate, alpha-isomer	LOW	LOW

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
xylene	MEDIUM (BCF = 740)
toluene	LOW (BCF = 90)
n-butyl acetate	LOW (BCF = 14)
propylene glycol monomethyl ether acetate, alpha-isomer	LOW (LogKOW = 0.56)

## Mobility in soil

-	
Ingredient	Mobility
toluene	LOW (KOC = 268)
n-butyl acetate	LOW (KOC = 20.86)
propylene glycol monomethyl ether acetate, alpha-isomer	HIGH (KOC = 1.838)

## **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Legislation addressing waste disposal requirements may differ by country, state and/ or territory.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>Recycle wherever possible.</li> </ul>

## **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.

Do not allow product or wash water from cleaning or process equipment to enter drains or watercourses. It may be necessary to collect all wash water for treatment before disposal. The generation of waste should be avoided or minimised wherever possible.

Disposal of this product should comply with Hazard Substances (Disposal) Notice 2017 (EPA Consolidation 30 April 2021) and local regulations.

Flammable substance can be disposed of if the substance is treated by using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance, or exporting the substance from New Zealand as waste.

For treating and discharging processes contact your local authority.

The treating may include burning the substance if the burning is managed to ensure that no person, or place where a person may legally be present.

The substance may be discharged into the environment as waste or disposed into a landfill if the substance will not come into contact with oxidising substances and where is no ignition source which is capable to ignite the substance.

## **SECTION 14 Transport information**

## Labels Required



## Land transport (UN)

14.1. UN number or ID number	1263				
14.2. UN proper shipping name	NNT RELATED MATERIAL (including paint thinning or reducing compound); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, lish, liquid filler and liquid lacquer base)				
14.3. Transport hazard class(es)	Class 3 Subsidiary Hazard Not Applicable				
14.4. Packing group	I				
14.5. Environmental hazard	Not Applicable				
14.6. Special precautions for user	Special provisions     163; 367       Limited quantity     5 L				

#### Air transport (ICAO-IATA / DGR)

14.1. UN number	1263			
14.2. UN proper shipping name	Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)			
	ICAO/IATA Class	3		
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable		
	ERG Code	3L		
14.4. Packing group	11			
14.5. Environmental hazard	Not Applicable			
	Special provisions		A3 A72 A192	
	Cargo Only Packing Instructions		364	
	Cargo Only Maximum Qty / Pack		60 L	
14.6. Special precautions for user	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 Ma	aximum Qty / Pack	1 L	

## Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1263	1263			
14.2. UN proper shipping name	PAINT RELATED MATERIAL (including paint thinning or reducing compound); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)				
14.3. Transport hazard class(es)	IMDG Class	3			
	IMDG Subsidiary Hazard	Not Applicable			

14.4. Packing group	п	
14.5 Environmental hazard	Not Applicable	
	EMS Number	F-E , S-E
14.6. Special precautions for user	Special provisions	163 367
	Limited Quantities	5 L

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

Not Applicable

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

Product name	Group
xylene	Not Available
toluene	Not Available
n-butyl acetate	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available

### 14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
xylene	Not Available
toluene	Not Available
n-butyl acetate	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	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.

## xylene is found on the following regulatory lists

A your is round on the following regulatory note
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
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 Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

### 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 - Not Classified as Carcinogenic

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 Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

## n-butyl acetate 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 Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

### propylene glycol monomethyl ether acetate, alpha-isomer is found on the following regulatory lists

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 Inventory of Chemicals (NZIoC)

#### Additional Regulatory Information

Not Applicable

#### Hazardous Substance Location

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

Hazard Class

Quantity (Closed Containers)

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				1L

#### **Tracking Requirements**

Not Applicable

## **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (xylene; toluene; n-butyl acetate; propylene glycol monomethyl ether acetate, alpha-isomer)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
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	Yes
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	01/02/2024
Initial Date	13/10/2017

#### **SDS Version Summary**

Version	Date of Update	Sections Updated
2.4	01/02/2024	Hazards identification - Classification

#### 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.

#### **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

- DNEL: Derived No-Effect Level
   PNEC: Predicted no-effect concentration
- 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

- 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
   TSCA: Toxica Chemical Substance Inventory
- 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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