RESENE GP THINNERS RESENE AUTOMOTIVE & LIGHT INDUSTRIAL

Version No: 1.1.7.9

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

Issue Date: **12/08/2021** Print Date: **13/08/2021** L.GHS.NZL.EN

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

Product Identifier

Product name	RESENE GP THINNERS
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Other means of identification	Not Available

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

Relevant identified uses	7211
--------------------------	------

Details of the supplier of the safety data sheet

Registered company name	RESENE AUTOMOTIVE & LIGHT INDUSTRIAL
Address	32-50 Vogel Street Naenae Wellington New Zealand
Telephone	+64 4 5770500
Fax	+64 4 5773327
Website	www.resene.co.nz
Email	advice@resene.co.nz

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	0800 764766	+61 2 9186 1132
Other emergency telephone numbers	0800 737636	+64 800 700 112

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

SECTION 2 Hazards identification

Classification of the substance or mixture

Classification ^[1]	Specific target organ toxicity - single exposure Category 2, Flammable Liquid Category 2, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Reproductive Toxicity Category 2, Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 3
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, 6.1E (aspiration), 6.3A, 6.4A, 6.8B, 6.9B, 9.1C

Label elements

Hazard pictogram(s)







Signal word Danger

Hazard statement(s)

H371	May cause damage to organs. (Oral, Inhalation)
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Version No: **1.1.7.9** Page **2** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

Print Date: 13/08/2021

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.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.
P331	Do NOT induce vomiting.
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.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician/first aider.
P337+P313	If eye irritation persists: Get medical advice/attention.
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].
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

• • • • • • • • • • • • • • • • • • • •	
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
67-63-0	5-15	isopropanol
110-82-7	1-5	<u>cyclohexane</u>
67-64-1	3-6	acetone
123-86-4	5-15	n-butyl acetate
108-88-3	30-60	toluene
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

Description of mist and 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.

 Version No: 1.1.7.9
 Page 3 of 12
 Issue Date: 12/08/2021

 Print Date: 13/08/2021
 Print Date: 13/08/2021

RESENE GP THINNERS

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.

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

Treat symptomatically.

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		
Fire Fighting	▶ Alert Fire Brigade and tell them location and nature of hazard.	
Fire/Explosion Hazard	Liquid and vapour are highly flammable. 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. WARNING: Long standing in contact with air and light may result in the formation	

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

of potentially explosive peroxides.

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Remove all ignition sources. Contain spill with inert non- combustible absorbent then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean- up.
Major Spills	Remove all ignition sources. Clear area of personnel and move upwind. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non- combustible material onto spillage. Use clean non- sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authority.

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

SECTION 7 Handling and storage

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

 Version No: 1.1.7.9
 Page 4 of 12
 Issue Date: 12/08/2021

 Print Date: 13/08/2021
 Print Date: 13/08/2021

RESENE GP THINNERS

Storage incompatibility

Packing as supplied by manufacturer.

Preacts violently with strong oxidisers
Attacks some plastics, rubber and coatings
Preacts with metallic aluminium at high temperature

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)	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m3	1230 mg/m3 / 500 ppm	Not Available	Not Available
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)	acetone	Acetone	500 ppm / 1185 mg/m3	2375 mg/m3 / 1000 ppm	Not Available	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
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene (Toluol)	50 ppm / 188 mg/m3	Not Available	Not Available	skin-Skin absorption

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
isopropanol	400 ppm	2000* ppm	12000** ppm
cyclohexane	300 ppm	1700* ppm	10000** ppm
acetone	Not Available	Not Available	Not Available
n-butyl acetate	Not Available	Not Available	Not Available
toluene	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
isopropanol	2,000 ppm	Not Available
cyclohexane	1,300 ppm	Not Available
acetone	2,500 ppm	Not Available
n-butyl acetate	1,700 ppm	Not Available
toluene	500 ppm	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.

For methylcyclohexane:

High concentrations produce narcosis in animals.

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

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

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 cyclohexane:

Odour Threshold Value: 784 ppm (detection)

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

for: hexane, isomers (excluding n-hexane)

The TLV-TWA is thought to be protective against nausea, headache, upper respiratory tract irritation and CNS depression.

Odour Threshold Value: 3.3 ppm (detection), 7.6 ppm (recognition)

Exposure at or below the recommended isopropanol TLV-TWA and STEL is thought to minimise the potential for inducing narcotic effects or significant irritation of the eyes or upper respiratory tract.

For n-hexane:

Odour Threshold Value: 65 ppm

NOTE: Detector tubes for n-hexane, measuring in excess of 100 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

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.









 Version No: 1.1.7.9
 Page 5 of 12
 Issue Date: 12/08/2021

 Print Date: 13/08/2021
 Print Date: 13/08/2021

RESENE GP THINNERS

Eye and face protection	► Safety glasses with side shields.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. For esters: Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials. 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.
Body protection	See Other protection below
Other protection	 Overalls. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

Respiratory protection

Respiratory protection required in insufficiently ventilated working areas. 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.

Type AX Filter of sufficient capacity.

SECTION 9 Physical and chemical properties

Information	an basis	mbycical	and chemical	

information on basic physical	and onomical proportion		
Appearance	Clear, colourless liquid		
Physical state	Liquid	Relative density (Water = 1)	0.828
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	101	Molecular weight (g/mol)	Not Available
Flash point (°C)	5	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 (%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	828

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	▶ stable.
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

Version No: **1.1.7.9** Page **6** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

individuals, following inhalation. Inhalation of vapours may cause drowsiness and dizziness. 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 use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Effects on the nervous system characterise over-exposure to higher aliphatic alcohols. At sufficiently high doses the material may be hepatotoxic (i.e. poisonous to the liver). Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical Ingestion pneumonitis; serious consequences may result. Considered an unlikely route of entry in commercial/industrial environments. 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. Most liquid alcohols appear to act as primary skin irritants in humans. Open cuts, abraded or irritated skin should not be exposed to this material **Skin Contact** Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either produces moderate inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant, but moderate, inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty-four hours or more after the end of the exposure period. Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or Eye may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. 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 Chronic carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Chronic inhalation or skin exposure to n-hexane may cause peripheral neuropathy, which is damage to nerve ends in extremities, e.g. fingers, with loss of sensation and characteristic thickening Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. TOXICITY IRRITATION **RESENE GP THINNERS** Not Available Not Available TOXICITY IRRITATION Dermal (rabbit) LD50: 12792 mg/kg^[1] Eye (rabbit): 10 mg - moderate isopropanol Inhalation(Mouse) LC50; 27.2 mg/l4h^[2] Eye (rabbit): 100 mg - SEVERE Oral(Mouse) LD50; 3600 mg/kg^[2] Eve (rabbit): 100mg/24hr-moderate Skin (rabbit): 500 mg - mild TOXICITY IRRITATION Dermal (rabbit) LD50: >2000 mg/kg^[1] Eye: no adverse effect observed (not irritating)[1]Skin(rabbit): 1548 mg/48hr - mild Inhalation(Rat) LC50; >5540 ppm4h^[1] cyclohexane Oral(Rabbit) LD50; 5.5 mg/kg^[2] Skin: adverse effect observed (irritating)^[1] Skin: no adverse effect observed (not irritating)[1] TOXICITY IRRITATION Dermal (rabbit) LD50: 20 $mg/kg^{[2]}$ Eye (human): 500 ppm - irritant Inhalation(Mouse) LC50; 44 mg/L4h^[2] Eve (rabbit): 20mg/24hr -moderate Eye (rabbit): 3.95 mg - SEVERE Oral(Rat) LD50; 1738 mg/kg^[1] acetone Eye: adverse effect observed (irritating)^[1] Skin (rabbit): 500 mg/24hr - mild

n-butyl acetate	n-butyl	acetate
-----------------	---------	---------

TOXICITY	IRRITATION
Dermal (rabbit) LD50: >14100 mg/kg ^[2]	Eye (human): 300 mg
Inhalation(Rat) LC50; 0.74 mg/l4h ^[2]	Eye (rabbit): 20 mg (open)-SEVERE

Skin (rabbit):395mg (open) - mild

Skin: no adverse effect observed (not irritating)^[1]

Print Date: 13/08/2021

Version No: **1.1.7.9** Page **7** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

Print	Date:	13/08/2021	

	Oral(Rat) LD50; >3200 mg/kg ^[2]	Eye (rabbit): 20 mg/24h - moderate	
		Eye: no adverse effect observed (not irritating) ^[1]	
		Skin (rabbit): 500 mg/24h-moderate	
		Skin: no adverse effect observed (not irritating) ^[1]	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >5000 mg/kg ^[1]	Eye (rabbit): 2mg/24h - SEVERE	
	Inhalation(Rat) LC50; 12.5-28.8 mg/l4h ^[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]	
Legend:	Nalue obtained from Europe ECHA Registered Substances - A specified data extracted from RTECS - Register of Toxic Effect of	cute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise chemical Substances	
	-		
RESENE GP THINNERS	Data demonstrate that during inhalation exposure, aromatic hydro	carbons undergo substantial partitioning into adipose tissues.	
ISOPROPANOL	For isopropanol (IPA): Acute toxicity: Isopropanol has a low order of acute toxicity. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.		
CYCLOHEXANE	Bacteria mutagen		
ACETONE	for acetone: The acute toxicity of acetone is low.		

ISOPROPANOL Asthma-like symptoms may conting
RESENE GP THINNERS & Generally,linear and branched-cha
N-BUTYL ACETATE and most tissues throughout the band of the street of

Asthma-like symptoms may continue for months or even years after exposure to the material ceases.

Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood

N-BUTYL ACETATE an

N-BUTYL ACETATE

and most tissues throughout the body.

The material may produce severe irritation to the eye causing pronounced inflammation.

RESENE GP THINNERS & TOLUENE

RESENE GP THINNERS &

Acute Toxicity

EC50

96h

Humans exposed to intermediate to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis, and death.

ISOPROPANOL & ACETONE & N-BUTYL ACETATE & TOLUENE

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).

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

Legend:

Algae or other aquatic plants

X − Data either not available or does not fill the criteria for classification
 ✓ − Data available to make classification

>1000mg/l

SECTION 12 Ecological information

Toxicity

DECEME OR THINNERS	Endpoint		Test Duration (hr)		Species	Value		Source	
RESENE GP THINNERS	Not Available		Not Available		Not Available	Not Available		Not Avail	able
	Endpoint	Tes	st Duration (hr)	Spec	ies		Value		Source
isopropanol	EC50(ECx)	24h	1	Algae	e or other aquatic plants		0.011mg	/L	4
	EC50	72h	1	Algae	e or other aquatic plants		>1000mg	g/l	1
	LC50	96h	1	Fish			4200mg/	'I	4
	EC50	48h	1	Crus	tacea		7550mg/	1	4

Version No: **1.1.7.9** Page **8** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

Print Date: 13/08/2021

CVC	loh	exa	ne

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	3.428mg/l	2
LC50	96h	Fish	4.53mg/l	2
EC50	48h	Crustacea	0.9mg/l	2
BCF	1344h	Fish	31-102	7
EC50(ECx)	48h	Crustacea	0.9mg/l	2
EC50	96h	Algae or other aquatic plants	2.17mg/l	2

acetone

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	48h	Fish	0.001mg/L	4
LC50	96h	Fish	>100mg/l	4
EC50	48h	Crustacea	6098.4mg/L	5
EC50	96h	Algae or other aquatic plants	9.873-27.684mg/l	4

n-butyl acetate

Endpoint	Test Duration (hr)	Species	Value	Source
EC50(ECx)	96h	Fish	18mg/l	2
EC50	72h	Algae or other aquatic plants	246mg/l	2
LC50	96h	Fish	18mg/l	2
EC50	48h	Crustacea	32mg/l	1

toluene

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96h	Fish	5-35mg/l	4
EC50	48h	Crustacea	3.78mg/L	5
NOEC(ECx)	168h	Crustacea	0.74mg/L	5
EC50	96h	Algae or other aquatic plants	>376.71mg/L	4

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful 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.

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.

For aromatic hydrocarbons:

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

For isopropanol (IPA): log Kow: -0.16-0.28 Half-life (hr) air: 33-84

Half-life (hr) H2O surface water : 130 Henry's atm m3 /mol: 8.07E-06

BOD 5: 1.19,60% COD: 1.61-2.30,97%

ThOD: 2.4

BOD 20: >70% * [Akzo Nobel]

Environmental Fate

Based on calculated results from a lever 1 fugacity model, IPA is expected to partition primarily to the aquatic compartment (77.7%) with the remainder to the air (22.3%).

For n-hexane: log Kow: 3.17-3.94 BOD 5 if unstated: 2.21 COD: 0.04 ThOD: 3.52

Environmental fate:

Transport and Partitioning: The physical properties of *n*-hexane that affect its transport and partitioning in the environment are: water solubility of 9.5 mg/L; log[Kow] (octanol/water partition coefficient), estimated as 3.29; Henry's law constant, 1.69 atm-m3 mol; vapor pressure, 150 mm Hg at 25 C; and log[Koc] in the range of 2.90 to 3.61. For ketones:

Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds

Hydrolysis may also involve the addition of water to ketones to yield ketals under mild acid conditions.

For toluene: log Kow : 2.1-3 log Koc : 1.12-2.85 Koc : 37-260 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: 5.94E-03

BOD 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

Version No: 1.1.7.9 Page 9 of 12 Issue Date: 12/08/2021

RESENE GP THINNERS

Print Date: 13/08/2021

Environmental fate:

Transport: The majority of toluene evaporates to the atmosphere from the water and soil. It is moderately retarded by adsorption to soils rich in organic material (Koc = 259), therefore, transport to ground water is dependent on the soil composition.

for acetone: log Kow: -0.24

Half-life (hr) air: 312-1896 Half-life (hr) H2O surface water: 20 Henry's atm m3 /mol: 3.67E-05 BOD 5: 0.31-1.76,46-55%

COD: 1.12-2.07 ThOD: 2.2 BCF: 0.69

Environmental fate:

Acetone preferentially locates in the air compartment when released to the environment

For n-butyl acetate: Half-life (hr) air : 144

Half-life (hr) H2O surface water : 178-27156

Henry's atm m3 /mol: 3.20E-04 BOD 5 if unstated: 0.15-1.02,7%

COD: 78% ThOD: 2.207 BCF: 4-14

Environmental Fate:

TERRESTRIAL FATE: An estimated Koc value of 200 determined from a measured log Kow of 1.78 indicates that n-butyl acetate is expected to have moderate mobility in soil. DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
cyclohexane	HIGH (Half-life = 360 days)	LOW (Half-life = 3.63 days)
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
n-butyl acetate	LOW	LOW
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)
cyclohexane	LOW (BCF = 242)
acetone	LOW (BCF = 0.69)
n-butyl acetate	LOW (BCF = 14)
toluene	LOW (BCF = 90)

Mobility in soil

mobility in con	
Ingredient	Mobility
isopropanol	HIGH (KOC = 1.06)
cyclohexane	LOW (KOC = 165.5)
acetone	HIGH (KOC = 1.981)
n-butyl acetate	LOW (KOC = 20.86)
toluene	LOW (KOC = 268)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- ▶ Containers may still present a chemical hazard/ danger when empty.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory.
- DO NOT allow wash water from cleaning or process equipment to enter drains
- ► Recycle wherever possible.

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.

SECTION 14 Transport information

Labels Required

Version No: **1.1.7.9** Page **10** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

Print Date: 13/08/2021



Land transport (UN)

UN number	1263				
UN proper shipping name	NT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL sluding paint thinning or reducing compound)				
Transport hazard class(es)	Class 3 Subrisk Not Applicable				
Packing group					
Environmental hazard	Not Applicable				
Special precautions for user	Special provisions 163; 367 Limited quantity 5 L				

Air transport (ICAO-IATA / DGR)

UN number	1263			
UN proper shipping name	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)			
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk	3 Not Applicable		
	ERG Code	G Code 3L		
Packing group	П			
Environmental hazard	Not Applicable			
	Special provisions		A3 A72 A192	
	Cargo Only Packing Instructions		364	
Special precautions for user	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	

Sea transport (IMDG-Code / GGVSee)

UN number	1263	
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk Not Applicable	
Packing group	П	
Environmental hazard	Not Applicable	
Special precautions for user	EMS Number F-E , S-E Special provisions 163 367 Limited Quantities 5 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
isopropanol	Not Available
cyclohexane	Not Available
acetone	Not Available
n-butyl acetate	Not Available
toluene	Not Available

Version No: **1.1.7.9** Page **11** of **12** Issue Date: **12/08/2021**

RESENE GP THINNERS

Print Date: 13/08/2021

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
isopropanol	Not Available
cyclohexane	Not Available
acetone	Not Available
n-butyl acetate	Not Available
toluene	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
HSR002650	Solvents 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.

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				1L

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
New Zealand - NZIoC	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	12/08/2021
Initial Date	19/02/2015

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

Version No: 1.1.7.9 Page 12 of 12 Issue Date: 12/08/2021

RESENE GP THINNERS

Print Date: 13/08/2021

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

Powered by AuthorITe, from Chemwatch.