SAFETY DATA SHEET

Issue Date Feb 2022 **Revision Date** Feb 2022 **Version** 1

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name CUROX M-200 (NA1) CATALYST

Description Clear Liquid

Other means of identification

UN Number UN3105

Recommended use of the chemical and restrictions on use

Recommended Use Industrial and Professional use only.

Details of the supplier of the safety data sheet

Manufacturer

Norski Holdings Ltd
10 Northpoint Street
Plimmerton
Wellington 5247
New Zealand

For further information, please contact

Contact Point +64 (04) 233 6184
E-mail address Enquiries@norski.co.nz

Emergency telephone number

Emergency Telephone +64 0800 500 341

Section 2: HAZARD(S) IDENTIFICATION

EPA New Zealand HSNO approval code or group standard HSR002630
Group Standard: Oxidising substances (class 5.1.1) and organic peroxides (class 5.2) (Organic peroxides, Corrosive) Group Standard 2006.

GHS Classification

Flammable liquids	Category 4 (HSNO - 3.1D)
Organic peroxides	Type D (HSNO - 5.2D)
Acute toxicity - Oral	Category 4 (HSNO - 6.1D)
Skin corrosion/irritation	Category 1 B (HSNO - 8.2B)
Serious eye damage/eye irritation	Category 1 (HSNO - 8.3A)
Chronic aquatic toxicity	Category 2 (HSNO - 9.1B)

Label elements

Signal word Danger

Hazard statements
H227 - Combustible liquid
H242 - Heating may cause a fire
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapours/spray
Wear protective gloves/protective clothing/eye protection/face protection
Avoid release to the environment
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep/Store away from clothing/combustible materials
Keep only in original container
Precautionary Statements - Response
Immediately call a POISONS INFORMATION CENTRE or doctor Specific
treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISONS INFORMATION CENTRE or doctor
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before re-use
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISONS INFORMATION CENTRE or doctor "

Rinse mouth
Do NOT induce vomiting
Collect spillage
Precautionary Statements - Storage
Store locked up
Store at temperatures not exceeding .?1 °C/ .?2 °F. Keep cool
Store away from other materials
Protect from sunlight
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
No hazard identified

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Dimethyl phthalate	131-11-3	60-100
Methyl ethyl ketone peroxide	1338-23-4	30-<60
Methyl ethyl ketone	78-93-3	5-<10
Hydrogen peroxide	7722-84-1	1-<5
Non-hazardous ingredients	Balance	

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice

Show this Safety Data Sheet to the Doctor in attendance. Immediate medical attention is required.

Emergency Telephone Number:

Poison Information Centre New Zealand 0800 764 766

Inhalation

Remove to Fresh Air. If breathing has stopped, give artificial respiration. Get Medical Attention Immediately. If not breathing give artificial respiration. Do not use mouth to mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one- way valve or other proper respiratory device. If breathing is difficult trained personnel should give oxygen. Delayed pulmonary oedema may occur. Get immediate medical advice/attention. Get immediate medical attention if symptoms occur.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. If skin irritation persists, call a doctor.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a doc

Self Protection of First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Remove all sources of ignition.

Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most Important Symptoms and Acute and Delayed Symptoms

Burning

Indication of any Immediate Medical Attention and Special Treatment Needed.

Note to Doctors

Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal oedema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

Section 5: FIREFIGHTING MEASURES

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray or fog is preferred; if water not available use dry chemical, CO2 or regular foam. Flood fire area with water from a distance. Use water or fog; do not use straight streams. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol-resistant foam.

Unsuitable extinguishing media

Do not use water jetstream

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition. These substances will accelerate burning when involved in a fire. Some may burn rapidly with flare burning effect. Some may decompose explosively when heated or involved in a fire. May ignite combustibles (wood paper, oil, clothing, etc.). Run-off may create fire or explosion hazard. In the event of fire, cool tanks with water spray. The product causes irritation of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Special protective actions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. Oxidiser. May ignite combustibles (wood paper, oil, clothing, etc.). Some may burn rapidly with flare burning effect. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn.

Hazchem code 2WE.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See section 8 for more information. Stop leak if you can do it without risk. DO NOT CLEAN UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST. Use personal protective equipment as required. Take action to prevent static discharges. Do not touch or walk through spilled material. Attention! Corrosive material.

Keep combustibles (wood, paper, oil, etc.) away from spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders

Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dam far ahead of liquid spill for later disposal.

Methods for cleaning up

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimise spreading. Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal. Flush area with flooding quantities of water. Prevent product from entering drains.
Take action to prevent static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections
See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protection equipment. Avoid contact with skin, eyes or clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Use only with adequate ventilation. Do not breathe vapour or mist. Take action to prevent static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Take off contaminated clothing and wash it before reuse.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Protect from moisture. Store locked up. Store separately. Ambient transport organic peroxides are recommended to be stored temperatures below 30C/ 86F to maintain product quality.

Incompatible materials
Organic material. Combustible material. Hydrocarbons. Strong acids. Strong bases. Strong oxidising agents.

Note that this product must be stored as an Organic Peroxide and not a Combustible Liquid.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical Name	New Zealand
Dimethyl phthalate 131-11-3	TWA: 5 mg/m3
Methyl ethyl ketone peroxide 1338-23-4	Ceiling: 0.2 ppm Ceiling: 1.5 mg/m3
Methyl ethyl ketone 78-93-3	TWA: 150 ppm TWA: 445 mg/m3 STEL: 300 ppm STEL: 890 mg/m3
Hydrogen peroxide 7722-84-1	TWA: 1 ppm TWA: 1.4 mg/m3

Biological occupational exposure limits

Chemical Name	New Zealand
Methyl ethyl ketone 78-93-3	2 mg/L urine end of shift MEK

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Gloves made of plastic or rubber. Suitable protective clothing. Apron. Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate. Antistatic footwear.

Hand Protection Wear suitable gloves.

Respiratory protection Where respiratory protection is required, use a respirator selected and in accordance with AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance clear
Colour colourless
Odour Slight Pungent
Odour threshold No information available

Property	Values	Remarks •Method
pH	< 7	

Melting point / freezing point		No information available
Boiling point/boiling range		No information available
Flash point	68 °C	Approximately Seta Closed Cup ISO 3679
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapour pressure	500	hPa, 50°C
Vapour density		No information available
Relative density	1.15	
Water solubility		Miscible
Solubility(ies)	-	No information available
Partition coefficient		No information available
Auto-ignition temperature	281 °C	
Decomposition temperature	60	SADT
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties	No information available	
Oxidising properties	Not applicable	

Other Information

VOC Content (%)	No information available
Density	No information available

* This information may be derived from the components in the preparation.

Section 10: STABILITY AND REACTIVITY

Reactivity
No Data Available.

Chemical stability

Organic peroxide. MAY CAUSE FIRE.

Explosion data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	May be ignited by heat, sparks or flames.

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Organic material. Combustible material. Hydrocarbons. Strong acids. Strong bases. Strong oxidising agents.

Hazardous Decomposition Products

Self-accelerating decomposition may occur if the specific control temperature is not maintained. Decomposition products can include and are not limited to:. Methyl ethyl ketone peroxide.

Section 11: TOXICOLOGICAL INFORMATION

INHALATION

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary oedema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic oedema of the lungs. Pulmonary oedema can be fatal.

EYE CONTACT

Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Risk of serious damage to eyes.

SKIN CONTACT

Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns

INGESTION

Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhoea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document
Converted acute toxicity point estimates may have been used when only acute toxicity hazard classification is available.

ATEmix (oral) 1,137.00
ATEmix (dermal) 40,000.00
ATEmix (inhalation-vapour) 239.00
ATEmix (inhalation-dust/mist) 67.00
0% of the mixture consists of ingredient(s) of unknown toxicity
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl phthalate	= 6800 mg/kg (Rat)	-	-
Methyl ethyl ketone peroxide	= 470 mg/kg (Rat) = 407 mg/kg (Rat)	-	= 200 ppm (Rat) 4 h
Methyl ethyl ketone	= 2737 mg/kg (Rat) = 2483 mg/kg (Rat)	= 6480 mg/kg (Rabbit) = 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
Hydrogen peroxide	= 1518 mg/kg (Rat)	= 4060 mg/kg (Rat) = 2000 mg/kg (Rabbit)	= 2 g/m3 (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation
Classification based on individual ingredients of the mixture. Risk of serious damage to eyes. Causes burns.

Sensitisation
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity

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Chemical Name	New Zealand
Hydrogen peroxide - 7722-84-1	Suspected human carcinogen

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Fish
Dimethyl phthalate	49.5 mg/L LC50 96 h Lepomis macrochirus 39 mg/L LC50 96 h Pimephales promelas flow-through 37 - 69 mg/L LC50 96 h Lepomis macrochirus static 100 - 220 mg/L LC50 96 h Leuciscus idus static 56 mg/L LC50 96 h Oncorhynchus mykiss flow-through 121 mg/L LC50 96 h Pimephales promelas static
Methyl ethyl ketone	3130 - 3320 mg/L LC50 96 h Pimephales promelas flow-through
Hydrogen peroxide	16.4 mg/L LC50 96 h Pimephales promelas 10.0 - 32.0 mg/L LC50 96 h Oncorhynchus mykiss static 18 - 56 mg/L LC50 96 h Lepomis macrochirus static

Chemical Name	Crustacea
Dimethyl phthalate	33 mg/L EC50 48 h Daphnia magna
Methyl ethyl ketone	520 mg/L EC50 48 h Daphnia magna 4025 - 6440 mg/L EC50 48 h Daphnia magna Static 5091 mg/L EC50 48 h Daphnia magna
Hydrogen peroxide	18 - 32 mg/L EC50 48 h Daphnia magna Static 7.7 mg/L EC50 24 h Daphnia magna

Chemical Name	Algae/aquatic plants
Dimethyl phthalate	142 mg/L EC50 96 h Pseudokirchneriella subcapitata static 20.6 - 45.8 mg/L EC50 96 h Pseudokirchneriella subcapitata 26.1 mg/L EC50 96 h Skeletonema costatum 28.4 - 71 mg/L EC50 72 h Pseudokirchneriella subcapitata 204 mg/L EC50 72 h Desmodesmus subspicatus
Hydrogen peroxide	2.5 mg/L EC50 72 h Chlorella vulgaris

Persistence and degradability

No information available.

Bioaccumulative potential

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Chemical Name	Partition coefficient
Dimethyl phthalate	*2.12*
Methyl ethyl ketone	*0.29*

Mobility

Mobility in soil
No information available.

Mobility
No information available.

Other adverse effects
No information available.

Endocrine Disruptor Information .

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Dimethyl phthalate	Group III Chemical	-	-

Section 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from Residues/unused products

Refer to all federal state and local Regulations prior to disposal of container and unused contents by re-use recycle or disposal.

Contaminated Packaging

Disposal should be in accordance with applicable regional national, and local laws and regulations. Observe all label precautions until container is cleaned reconditioned or destroyed. Refer to all
federal state and local regulations prior to
regulations prior to disposal of container and unused contents by re -use recycle and disposal.

Section 14 : Transport Information

Proper shipping name	ORGANIC PEROXIDE TYPE D, LIQUID
Description	UN3105, ORGANIC PEROXIDE TYPE D, LIQUID (Methyl ethyl ketone peroxide, Hydrogen peroxide), 5.2
Hazard Class	5.2
Special Precautions for users	122, 274, 323
Hazchem code	2WE.
IERG	32

IMDG

UN/ID no	UN3105
Proper shipping name	ORGANIC PEROXIDE TYPE D, LIQUID
Description	UN3105, ORGANIC PEROXIDE TYPE D, LIQUID (Methyl ethyl ketone peroxide, Hydrogen peroxide), 5.2
Hazard Class	5.2
EmS-No	F-J, S-R
Special Precautions for users	122, 274

Transport in Bulk According to Annex II of MARPOL and the IBC CODE
No information available

IATA

UN/ID no
Proper shipping name
Description

Hazard Class

Section 15: REGULATORY INFORMATION

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

New Zealand Regulatory information

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. See section 8 for national exposure control parameters.

EPA New Zealand HSNO approval code or group standard HSR002630
Group Standard: Oxidising substances (class 5.1.1) and organic peroxides (class 5.2) (Organic peroxides, Corrosive) Group Standard 2006.

This Group Standard contains all trigger quantities for New Zealand HSNO requirements.

International Inventories

AICS - Australian Inventory of Chemical Substances	Listed or exempt
DSL - Canadian Domestic Substances List	Listed or exempt
IECSC - China Inventory of Existing Chemical Substances	Listed or exempt
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances	Listed or exempt
ENCS - Japan Existing and New Chemical Substances	Listed or exempt
KECL - Korean Existing and Evaluated Chemical Substances	Listed or exempt
NZIoC - New Zealand Inventory of Chemicals	Listed or exempt
PICCS - Philippines Inventory of Chemicals and Chemical Substances	Listed or exempt
CICR - Turkey Chemical Inventory Control Regulation	No information available
NCSR - Taiwan National Chemical Substance Registry	No information available
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	Listed or exempt

For confirmation on the European REACh status contact the Allnex Compliance group at PSRA-Customer-Requests@allnex.com

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

Section 16: ANY OTHER RELEVANT INFORMATION

Revision Date Feb 2022

Revision Note Date Updated

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Disclaimer

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

End of Safety Data Sheet

SAFETY DATA SHEET

Issue Date Feb 2022

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier
Product Name **POLYPLEX INDUSTRIAL GRADE LSE RESIN 35**

Description **Liquid**

Other means of identification

UN Number **UN 1866**

Recommended use of the chemical and restrictions on use

Recommended Use **Recommended for Industrial and/or Professional use only**

Details of the supplier of the safety data sheet
Manufacturer
Norski Holdings Ltd
10 Northpoint Street
Plimmerton
Wellington 5247
New Zealand

For further information, please contact
Contact Point **Norski Holdings Ltd**
+64 (04) 233 6184

E-mail address **Enquiries@norski.co.nz**

Emergency telephone number
Emergency Telephone **0800 500 341**

Section 2: HAZARD(S) IDENTIFICATION

Regulatory information

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand

EPA New Zealand HSNO approval code or group standard

Group Standard: Additives, process chemicals and raw materials (Flammable) Group Standard 2006.
HSR002495

Dangerous Goods Class **Hazard Class 3 Packing Group III**
Chronic aquatic toxicity

GHS Classification

Flammable liquids	**Category 3 (HSNO - 3.1C)**
Reproductive toxicity	**Category 2 (HSNO - 6.8B)**
Acute toxicity - Inhalation (Dusts/Mists)	**Category 4 (HSNO - 6.1D)**
Specific target organ toxicity (repeated exposure)	**Category 1 (HSNO - 6.9A)**
Specific target organ toxicity (single exposure)	**Category 3 (HSNO - 6.1E)**
Skin corrosion/irritation	**Category 2 (HSNO - 6.3A)**
Serious eye damage/eye irritation	**Category 2 (HSNO - 6.4A)**
Acute aquatic toxicity	**Category 2 (HSNO - 9.1D)**
Chronic aquatic toxicity	**Category 3 (HSNO - 9.1C)**

Label Elements

Signal word Danger

Hazard statements
H226 - Flammable liquid and vapour
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapours/spray
Do not eat, drink or smoke when using this product
Avoid release to the environment
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Keep cool
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before re-use
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
In case of fire: Use CO2, dry chemical, or foam for extinction
Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product
Sanding and grinding dust may be harmful if inhaled
Avoid dust formation

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Styrene	100-42-5	30-<60
Dicocodimethylammonium chloride	61789-77-3	<0.25
Non-hazardous ingredients	Balance	

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Emergency telephone number Poisons Information Centre, New Zealand: 0800 764 766

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed symptoms

Burning

Indication of Immediate and immediate Treatment Needed

Treat Symptomatically

Section 5: FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO_2). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable extinguishing media
Do not use water jet stream

Specific hazards arising from the chemical

Flammable. Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Hazchem code **.3YE**

Hazardous Decomposition Products

Decomposition products can include and are not limited to: Styrene.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take action to prevent static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment
Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dam far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up
Take action to prevent static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections
See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation. Take off contaminated clothing and wash it before reuse.

General Hygiene Considerations
When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store separately. Hazardous polymerisation may take place during a fire due to heat. Closed containers could violently rupture. Do not store at temperatures above 27C.

Incompatible materials
Strong acids. Strong bases. Strong oxidising agents.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical Name	New Zealand
Styrene 100-42-5	TWA: 50 ppm TWA: 213 mg/m3 STEL: 100 ppm STEL: 426 mg/m3 Skin*

Biological occupational exposure limits

Chemical Name	New Zealand
Styrene 100-42-5	1 g/L urine end of shift Mandelic acid

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Antistatic footwear. Wear fire resistant or flame-retardant clothing. Gloves made of plastic or rubber. Suitable protective clothing. Apron.

Respiratory protection Where respiratory protection is required, use a respirator selected and in accordance with AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid
Appearance	clear Hazy
Colour	clear
Odour	Characteristic Styrene
Odour threshold	No information available

Property	**Values**	**Remarks •Method**
pH		Not applicable
Melting point / freezing point		No information available
Boiling point/boiling range	145 °C	(based on components)
Flash point	31 °C	Tag Closed Cup
Evaporation rate	0.49	
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:	6.1 %	
Lower flammability limit:	1.1 %	
Vapour pressure	6	hPa, 20°C Derived from solvent
Vapour density	3.6	Derived from solvent
Relative density	0.95	
Water solubility		Insoluble
Solubility(ies)	-	No information available
Partition coefficient		No information available
Auto-ignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity	316 mm2/s	
Dynamic viscosity	300	No information available
Explosive properties	No information available	
Oxidising properties	No information available	

Other Information

VOC Content (%)	No information available
Density	No information available

* This information may be derived from the components in the preparation.

Section 10: STABILITY AND REACTIVITY

Reactivity

No Data Available

Chemical Stability

Stable Under Normal Conditions.

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge May be ignited by heat sparks or flames

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions
HAZARDOUS POLYMERISATION MAY OCCUR UPON DEPLETION OF INHIBITOR.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong acids. Strong bases. Strong oxidising agents.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact

Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.

Skin contact

Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components

Ingestion

Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document
Converted acute toxicity point estimates may have been used when only acute toxicity hazard classification is available.

ATEmix (inhalation-vapour) 29.50
ATEmix (inhalation-dust/mist) 3.80
0% of the mixture consists of ingredient(s) of unknown toxicity
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Styrene	= 5000 mg/kg (Rat)	-	= 11.8 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Classification based on individual ingredients of the mixture. Irritating to skin.

Serious eye damage/eye irritation
Classification based on individual ingredients of the mixture. Irritating to eyes.

Sensitisation
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
Contains a known or suspected reproductive toxin.

STOT - single exposure
May cause respiratory irritation.

STOT - repeated exposure
Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 0.012% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Fish
Styrene	19.03 - 33.53 mg/L LC50 96 h Lepomis macrochirus Static 6.75 - 14.5 mg/L LC50 96 h Pimephales promelas Static 3.24 - 4.99 mg/L LC50 96 h Pimephales promelas flow-through 58.75 - 95.32 mg/L LC50 96 h Poecilia reticulata static

Chemical Name	Crustacea
Styrene	3.3 - 7.4 mg/L EC50 48 h Daphnia magna

Chemical Name	Algae/aquatic plants
Styrene	0.46 - 4.3 mg/L EC50 72 h Pseudokirchneriella subcapitata Static 0.15 - 3.2 mg/L EC50 96 h Pseudokirchneriella subcapitata Static 1.4 mg/L EC50 72 h Pseudokirchneriella subcapitata 0.72 mg/L EC50 96 h Pseudokirchneriella subcapitata

Persistence and degradability

No information available.

Bioaccumulative potential

.

Chemical Name	Partition coefficient
Styrene	*2.95*

Mobility

Mobility in soil

No information available.

Mobility

No information available.

Other adverse effects

.

Endocrine Disruptor Information .

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Styrene	Group I Chemical	High Exposure Concern	-

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Refer to all federal, state and local regulations prior to disposal of container and unused contents by re-use, recycle or disposal.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations. Observe all label precautions until container is cleaned, reconditioned or destroyed. Refer to all federal, state and local regulations prior to disposal of container and unused contents by re-use, recycle or disposal.

Section 14: TRANSPORT INFORMATION

Road transport

UN Number	UN1866
Proper shipping name	RESIN SOLUTION
Description	UN1866, RESIN SOLUTION, 3, III
Hazard Class	3
Packing Group	III
Special Precautions for users	223, *
Hazchem code	•3YE.
IERG	14

IMDG

UN/ID no	UN1866
Proper shipping name	RESIN SOLUTION
Description	UN1866, RESIN SOLUTION, 3, III, (31°C C.C.)
Hazard Class	3
Packing Group	III
EmS-No	F-E, S-E
Special Precautions for users	223, 955

Transport in Bulk According to Annex II of MARPOL and the IBC CODE
No information available

IATA

UN/ID no	UN1866
Proper shipping name	Resin solution
Description	UN1866, Resin solution, 3, III
Hazard Class	3
Packing Group	III
ERG Code	3L

Section 15: REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. See section 8 for national exposure control parameters

EPA New Zealand HSNO approval code or group standard HSR002495
Group Standard: Additives, process chemicals and raw materials (Flammable) Group Standard 2006.

International Inventories

AICS - Australian Inventory of Chemical Substances Listed or exempt

DSL - Canadian Domestic Substances List Listed or exempt

IECSC - China Inventory of Existing Chemical Substances Listed or exempt

EINECS/ELINCS - European Inventory of Existing Chemical Substances /European List of Notified Chemical Substances Listed or exempt

ENCS - Japan Existing and New Chemical Substances Listed or exempt

KECL - Korean Existing and Evaluated Chemical Substances Listed or Exempt

NZIoC - New Zealand Inventory of Chemicals Listed or Exempt

PICCS Philippines Inventory of Chemicals and Chemical Substances Listed or Exempt

CICR - Turkey Chemical Inventory Control Regulation No Information Available

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory No Information Available

NCSR - Taiwan National Chemical Substance Registry No Information Available.

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

Section 16: ANY OTHER RELEVANT INFORMATION

Revision Date	Feb 2022
Revision Note	Date Updated

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

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End of Safety Data Sheet