Safety Data Sheet
Vortex Resin

Classified as: Hazardous according to the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: Vortex Resin

Supplier: TransNet NZ Ltd
78 Cryers Road
East Tamaki
Auckland 2013
New Zealand

Phone: +64 9 274 3340

Website: www.transnet.co.nz

Recommended Use: Epoxy Resin

In Case of Emergency Contact:

National Poisons Centre: 0800 POISON (0800 764 766)

Section 2: HAZARDS IDENTIFICATION

Vortex Resin is classified as a Dangerous Good for Transport.

Vortex Resin is classified as hazardous according to criteria in the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

Classified under the group standard “Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020”

HSNO APPROVAL NUMBER: **HSR002670**

HSNO CLASSIFICATIONS: 6.3A – Irritating to skin
6.4A – Irritating to eyes
6.5B – Contact sensitiser
6.9B – Harmful to human target organs or systems, repeated exposure
9.1B – Ecotoxic in the aquatic environment

GHS Classification: Skin irritant – Category 2
Eye irritant - Category 2
Skin sensitisation – Category 1
Specific target organ toxicity (repeated exposure) – Category 2
Hazardous to the aquatic environment, chronic – Category 2

Hazard Statements:

H315 Causes skin irritation
H319 Causes serious eye irritation
H317 May cause an allergic skin reaction
H373 May cause damage to organs (Blood and Hematopoietic system) through prolonged or repeated exposure via skin contact
H411 Toxic to aquatic life with long lasting effects

GHS Pictograms:

WARNING

PREVENTION STATEMENTS:
P260 – Do not breathe fume/vapour.
P264 - Wash hands, exposed skin, thoroughly after handling.
P272 – Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.

RESPONSE STATEMENTS:
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
P362 – Take off contaminated clothing and wash before re-use.
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.
P321 – Specific treatment (see first aid instructions on this label).
P314 – Get medical advice/attention if you feel unwell.
P391 – Collect spillage.

DISPOSAL
P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Dispose of via an approved waste disposal contractor. Refer to Section 13 of the SDS.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixture: Resin

Main Component	CAS Number	Concentration (% wt)
Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	25068-38-6	75-90%
Bisphenol-F-epichlorhydrin resin with number average molecular weight < 700	28064-14-4	1-10%
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-	9003-36-5	< 1%

epoxypropane and phenol		
Oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	68609-97-2	< 1%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4: FIRST AID MEASURES

Workplace Facilities Required: Eye wash and safety shower facilities should be provided.

If Inhaled: Remove to fresh air. Seek medical attention if symptoms persist.

In Contact with Eye: Hold eyes open, flush with water for at least 15 minutes. Seek medical attention if irritation develops and persists.

In Contact with Skin: Wash skin with soap and water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if skin irritation develops and persists.

If Swallowed: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration to lungs.

Advice to Doctor: Treat symptomatically. Possible symptoms include vomiting, nausea, confusion, respiratory complaints, skin irritation. Symptoms may not occur until several hours. Keep under medical supervision for at least 48 hours.

Section 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Product is not flammable or combustible.

Suitable Extinguishing Media: Carbon dioxide, alcohol resistant foam, dry powder, water spray. Use an extinguishing agent suitable for surrounding fire. Do not use water jet.

Precautions in Connection with Fire: May give off noxious fumes in a fire containing oxides of carbon and nitrogen.

Advice for firefighters: Wear full firefighting gear and self-contained breathing apparatus. Remove containers from path of fire if safe to do so. Cool fire endangered containers with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

An emergency response plan complying with Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 is required when held in quantities greater than 1,000L.

Precautions: Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Avoid generating fumes/vapours. Avoid release to the environment.

Suitable Protective Equipment: Emergency responders must use personal protective equipment, including gloves, protective overalls and footwear, safety goggles or face shield and respiratory protection if there is a risk of inhaling fumes/vapours.

Spill or Leak Procedures. Contain the spill. Use absorbent material such as sand, earth to soak up spill. Collect spilled material and place in a suitable, closable chemical waste container. Ensure waste container is properly labelled.

Waste Disposal Methods: Dispose of as per Section 13.

Emergency preparation: Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with skin and eyes. Do not breathe fumes/vapours. Do not eat drink or smoke when using this product. Remove contaminated clothing and wash hands and face before entering eating areas.

Storage: Keep in original container. Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated area. Store in a contained area where any spill cannot seep into the ground or be dispersed outside the area. Do not store with incompatible substances, food, or animal feed.

Site Storage Requirements: Site Signage will be required when quantities exceed 1,000L.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ: No Workplace Exposure Standards have been established for this product or the ingredients.

Engineering Controls: Eyewash facilities and safety showers should be provided in the work area where there is a risk of exposure to eyes and skin. If use generates fumes/vapours, use engineering controls such as local exhaust ventilation to ensure workers are not exposed to levels exceeding the exposure standards.

Personal Protective Equipment: Avoid contact with the skin and eyes. Avoid inhaling fumes/vapours.

Hand protection: Wear protective gloves that are resistant to the product. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.

Skin and body protection: Use protective clothing. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.

Eye protection: Use safety glasses with side shields or safety goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.

Respiratory protection: Where there is inadequate ventilation, use a respirator. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

PPE selected must be impervious to the substance. Do not eat, smoke, or drink

Other information: where material is handled, processed, or stored. Wash hands carefully before eating, drinking, or smoking. Handle in accordance with safe industrial hygiene practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Description:	Liquid	**Colour:**	Yellow
Odour:	Slight, bland	**Odour Threshold:**	Not determined
pH (20°C):	Not determined	**Solubility (water, 20°C):**	Insoluble
Melting point:	Not determined	**Boiling Point:**	>200°C
Flammability:	Non-flammable	**Flash Point:**	> 150°C
UEL/LEL:	Not applicable	**Vapour Pressure (20°C):**	Not determined
Vapour Density:	Not determined	**Evaporation Rate:**	Not applicable
Decomposition Temp:	Not determined	**Autoignition Temp:**	Not applicable
Relative Density:	1.17 (20°C)	**Bulk Density (20°C):**	Not applicable
Partition Coefficient: n-octanol/water	Not determined	**Viscosity (kinematic 25°C):**	8000-15000 mPa*s
Particle characteristics:	Not applicable		

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal dry, cool storage conditions.

Reactivity: May react with strong acids, alkalis, and oxidisers.

Conditions to Avoid: Keep away from heat.

Incompatibility: Incompatible with acids, alkalis, strong oxidisers. Do not store with food or animal feed.

Hazardous Decomposition: Decomposes to form oxides of carbon and nitrogen.

Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

Acute Toxicity:
LD50 oral > 5000 mg/kg.
LD50 dermal > 5000 mg/kg
LC50 inhalation > 5 mg/L (dust or mist)

Inhalation: Not an expected route of exposure during normal conditions of use. Not expected to cause adverse toxic effects. However, if use results in formation of fumes or vapours then inhalation could cause coughing, shortness of breath and other symptoms of irritation.

Ingestion: Not expected to cause acutely toxic effects.

Skin Contact: Irritating to skin.

Eye Contact: Irritating to eyes.

Sensitiser: Contact sensitiser. Skin contact may produce an allergic skin reaction. Not expected to be a respiratory sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant No chronic toxicity effects expected.

Specific Target Organ Systemic Toxicity: May cause harm to the blood and hematopoietic system via skin contact through prolonged or repeated exposure.

Toxicity data is based on hazardous ingredient information and information in the EPA Chemical Classification and Identification Database and European Classification Database.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: LC/EC_{50} >1 but ≤ 10 mg/L.

Product is ecotoxic in the aquatic environment with long-lasting effects. Avoid losses of product to the environment wherever possible.

Persistence/degradability: Not rapidly biodegradable.

Bioaccumulation: Slight bio-accumulation potential.

Mobility: Product is insoluble in water.

Ecotoxicity data is based on hazardous ingredient information.

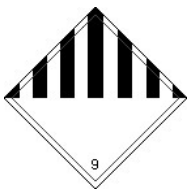
Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Dispose of waste product via an approved waste disposal contractor.

Disposal of Packaging: Packaging may contain product residues and should be treated as hazardous. Dispose of packaging via an approved waste disposal contractor.

Section 14: TRANSPORT INFORMATION

Vortex Resin is classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.

NZS5433:2020
UN No: 3082

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A epoxy resin)
Class: 9
Packing Group: III
Limited Quantity: 5L

IMDG:
UN No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A epoxy resin)
Class: 9
Packing Group: III
Marine Pollutant: Yes
EmS: F-A, S-F
Limited Quantity: 5L

IATA:
UN No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A epoxy resin)
Class: 9
Packing Group: III
ERG Code: 9L

Ensure transportation methods prevent leakage from packages and collapsing loads.

Section 15: REGULATORY INFORMATION

Group Standard Allocation: Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017

HSNO Approval Code: HSR002670

Classifications:
Skin irritant – Category 2
Eye irritant - Category 2
Skin sensitisation – Category 1
Specific target organ toxicity (repeated exposure) – Category 2
Hazardous to the aquatic environment, chronic – Category 2

This substance triggers:

Compliance Certificate	N/A
Certified Handler	N/A
Emergency Response Plan	1,000L
Secondary Containment	1,000L
Signage	1,000L

This substance is not required to be Tracked. All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance.

Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This

Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as an epoxy resin. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 27/09/2022

Reason for Revision: Update to New Zealand regulatory requirements.

References:

EPA NZ Chemical Classification and Information Database
European Chemical Classification Database
EPA Guide: Assigning a Hazardous Substance to a Group Standard, 2014

END OF SAFETY DATA SHEET