

SAFETY DATA SHEET

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Version 1

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name FLOWCOAT

Description White Liquid

Other means of identification

UN Number UN1866

Recommended use of the chemical and restrictions on use

Recommended Use

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

Regulatory information

EPA New Zealand HSNO approval code or group standard HSR002495 Group Standard Additives, Process Chemicals and Raw Materials (Flammable) Group Standard 2006

Dangerous Goods Class 3 PG III

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) |
| Skin sensitisation | Category 1A (HSNO - 6.5B) |
| Acute aquatic toxicity | Category 2 (HSNO - 9.1D) |
| Chronic aquatic toxicity | Category 3 (HSNO - 9.1C) |

Label elements



Signal word

DANGER

H226 - Flammable liquid and vapour
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
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
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
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 or rash 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

Avoid dust formation Sanding and grinding dust may be harmful if inhaled

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

| <u>Chemical Name</u> | <u>CAS No</u> | <u>Weight-%</u> |
|---------------------------------|----------------------|------------------------|
| Styrene | 100-42-5 | 30-<60 |
| Crystalline silica | 14808-60-7 | 1-<2.5 |
| 2-Hydroxy-4-methoxybenzophenone | 131-57-7 | <0.25 |
| Cobalt octoate | 136-52-7 | <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. IF exposed or concerned: Get medical advice/attention. |
| 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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Get medical attention if irritation develops and persists. Wash off immediately with soap and plenty of water for at least 15 minutes. |
| 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

Itching. Rashes. Hives. Burning sensation.

Indication of any immediate medical attention and special treatment needed

May cause sensitisation in susceptible persons. **SEEK URGENT MEDICAL ATTENTION**

Section 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable extinguishing media

Do not use water jetstream

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. Product is or contains a Sensitiser. May cause sensitisation by skin contact.

Special protective actions for fire-fighters

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

Hazchem code

•3WE.

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. In case of insufficient ventilation, wear suitable respiratory equipment.

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/m ³ STEL: 100 ppm STEL: 426 mg/m ³ Skin* |
| Crystalline silica 14808-60-7 | TWA: 0.2 mg/m ³ |

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

| <u>Property</u> | <u>Values</u> | <u>Remarks •Method</u> |
|--------------------------------|--------------------------|--------------------------------|
| pH | | No information available |
| 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 | 490 °C | Derived from solvent |
| Decomposition temperature | | No information available |
| Kinematic viscosity | 316 mm ² /s | |
| Dynamic viscosity | > 300 mPa s | 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

HAZARDOUS POLYMERISATION MAY OCCUR UPON DEPLETION OF INHIBITOR.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong acids. Strong bases. Strong oxidising agents.

Hazardous Decomposition Products

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

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 is not available. Irritating to the eyes based on components. Causes serious eye irritation.

Skin contact

Specific Test Data for the substance is not available. Causes skin irritation. May cause sensitisation by skin contact. Repeated or prolonged contact may cause allergic reaction reactions in very susceptible people.

Ingestion

Specific Test Data for the substance 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) 30.60

ATEmix (inhalation-dust/mist) 3.90

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 |
| Crystalline silica | - | - | - |
| 2-Hydroxy-4-methoxybenzophe none | = 7400 mg/kg (Rat) | - | - |

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

May cause sensitisation by skin contact.

Germ cell mutagenicity

No information available.

Carcinogenicity

| Chemical Name | New Zealand |
|---------------------------------|--|
| Crystalline silica - 14808-60-7 | Known or presumed human carcinogen if in fine respirable dust only |

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.

See section 16 for terms and abbreviations

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Unknown Aquatic Toxicity

0.04060791% of the mixture consists of component(s) of unknown hazards to the aquatic environment

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

| Chemical Name | Crustacea |
|---------------|---|
| Styrene | 3.3 - 7.4 mg/L EC50 48 h <i>Daphnia magna</i> |

| Chemical Name | Algae/aquatic plants |
|---------------|---|
| Styrene | 0.46 - 4.3 mg/L EC50 72 h <i>Pseudokirchneriella subcapitata</i> static 0.15 - 3.2 mg/L EC50 96 h <i>Pseudokirchneriella subcapitata</i> static 1.4 mg/L EC50 72 h <i>Pseudokirchneriella subcapitata</i> 0.72 mg/L EC50 96 h <i>Pseudokirchneriella subcapitata</i> |

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 .

Section 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from Residues/unused products

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 | *3Y. |
| 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

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

New Zealand Regulatory information

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 |
| 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

Legend Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

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

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End of Safety Data Sheet