



## Safety Data Sheet Crystic Gelcoat LS 97

Updated April 2021

### 1. Identification of the Material and Supplier

Product Name:	Crystic Gelcoat LS 97
Product Code:	LS 97/colour code/size(C/P/D)
HSNO Approval:	HSR002501
UN Number:	1866
DG Class:	3
Shipping Name:	Resin Solution, Flammable
Packaging Group:	III
Hazchem Code:	3Y
Uses:	Colour coating for reinforced polyester composites
Company:	H S Composites
Address:	63 Hunua Road, Papakura, Auckland 2110, NZ
Telephone:	+64 (09) 2952200
Email:	sales@hscomposites.co.nz
Website:	www.hscomposites.co.nz

### 2. Hazard Identification

Flammable Liquid	Category 3
Acutely Toxic – Inhalation	Category 4
Acutely Toxic – May be harmful aspiration hazard	Category 1
Skin Corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin Sensitisation	Category 1
Reproductive Toxicity	Category 2
Specific target organ toxicity (single and repeated exposure)	Category 1
Aquatic Toxicity (Chronic)	Category 2
Aquatic Toxicity (Acute)	Category 3

Signal Word: **DANGER**



Flammable

Irritant

Harmful

Aquatic Hazard

H226	Flammable liquid and vapor.
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HEALTH HAZARDS	
H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H355	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure

ENVIRONMENT HAZARDS	
H401	Toxic to aquatic life.

**PRECAUTIONARY STATEMENTS**

PREVENTION	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P233	Keep container tightly closed.
P243	Take precautionary measures against static discharged.
P260	Do not breathe dust/fume/gas/mist/ vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only in well-ventilated areas.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection

RESPONSE	
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin/hair with soapy water/shower.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water, remove contact lenses, if present and easy to do. Continue rinsing for 15 mins, seek medical advice if required.
P337+P313	If eye irritation persists, get medical attention.
P301+P330+P331	IF SWALLOWED: Rinse out mouth, do not swallow water, DO NOT induce vomiting.
P370+P378	In case of fire: Use appropriate media for extinction.

STORAGE	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P235	Keep cool.
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

DISPOSAL	
P501	Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

Other Hazards which do not result in classification.

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger. May form flammable/explosive vapour-air mixture.

Maintain dissolved oxygen and inhibitor at proper levels to prevent runaway polymerisation.

Repeated exposure may cause skin dryness or cracking, if symptoms persist seek medical advice.

Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Central nervous system (CNS). Auditory system. Respiratory system.

### 3. Composition / Information on Ingredients

Component	Cas No	Proportion
Styrene	100-42-5	40 – 44%
Titanium Dioxide	13463-67-7	<20%
Unsaturated Polyester		50 - 55%

### 4. First Aid

**Ingestion:** Harmful if swallowed. Single dose oral toxicity is low. Do not induce vomiting.

Aspiration of material into the lungs could cause pneumonitis which can be fatal. Give milk or water. Seek medical attention.

**Inhalation of Vapour:** Harmful. Effects may include headache, nausea, fatigue, central nervous system depression, pulmonary oedema. May be irritating to nose, throat and respiratory tract.

Move victim to fresh air. Apply artificial respiration or give oxygen if necessary. Seek medical attention.

**Eye Contact:** Irritant. Flush with copious amounts of water - lift eyelids repeatedly. Seek medical attention.

**Skin Contact:** Irritant. Wash thoroughly with soap and water. Remove contaminated clothing and launder before re-use. Seek medical advice if irritation persists.

Advice to Doctor: Treat symptomatically

### 5. Fire Fighting Measures

#### EXTINGUISHING MEDIA.

Foam, carbon dioxide, dry powder, water fog.

#### FLAMMABLE LIQUIDS AND VAPOURS.

Shut off product that may fuel the fire if safe to do so. Allow trained personnel to attend to fire in progress if safe to do so. Prevent extinguishing media from entering drains and waterways. Vapours are heavier than air and will sink to lowest point. Have SDS ready for firefighters.

#### HAZARDS FROM BURNING PRODUCT.

Thick black smoke, fumes, carbon dioxide and monoxide.

#### PRECAUTIONS FOR FIREFIGHTERS AND PROTECTIVE EQUIPMENT.

Full protective clothing and self-contained breathing apparatus.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS.

Styrene will polymerise at elevated temperatures. If this occurs in a closed container there is risk of violent rupture.

#### SPECIAL FIREFIGHTING PROCEDURES.

Fight like a fuel-oil fire. Water used in fire-fighting should not be allowed to enter drainage systems or contaminate soil.

### 6. Accidental Release Measures

Steps to be taken if the material is released or spilled.

Wear the correct PPE, see section 8.

Eliminate all sources of ignition (flames, hot surfaces, electrical, static or frictional sparks). Ventilate the surrounding area.

Contain the area of spillage and pump material into drums for use or disposal. Absorb remainder on sand or perlite and place the saturated absorbent into closed containers and label for disposal.

Prevent contamination of storm-water drains and waterways.

Waste disposal method. Destroy by liquid incineration with off-gas scrubber.

Contaminated absorbent to be disposed of in accordance with appropriate local or governmental regulations.

Correctly label all material containers to be disposed of.

Liquid material mixed with peroxide initiators should be allowed to gel before disposal as solid waste in accordance with appropriate local or national regulations.

### 7. Storage and Handling

Product and vapours are highly flammable.

Store below 30°C.

Store in well ventilated and locked in suitable Dangerous Goods area.

Avoid direct heat (flames, sunlight) sources of ignition (sparks from tools). NO SMOKING.

Keep container closed when not in use, this product will fuel a fire if exposed.

Handle with care and open slowly to release any pressure that has built up inside.

Containers may build up a static charge whilst in storage and cause spark (source of ignition).

Use earth straps to avoid static discharges.

Do not pressurise containers, cut, heat or weld as residue vapours are highly flammable.

## 8. Exposure Controls / Personal Protective Equipment

### Workplace Exposure Limit

Styrene (CAS# 100-42-5) is 20ppm TWA and 40ppm STEL.

Titanium Dioxide (CAS# 13463-67-7) is 10mg/m<sup>3</sup> TWA

Use general dilution or local exhaust ventilation to maintain vapour concentration below WES level. If concentrations exceed exposure limit use organic vapour canister mask or approved air-line mask.

Skin Protection: Wear overalls or other work clothing providing arm and leg cover. Use protective gloves (Latex or Nitrile).

Eye Protection: Safety goggles or splash mask.



## 9. Physical / Chemical Properties

<b>Physical Description &amp; colour:</b>	White coloured viscous liquid. Sweet or sharp aromatic odour of styrene.
<b>Odour: Boiling Point:</b>	145°C (Styrene)
<b>Specific Gravity:</b>	1.1 – 1.5
<b>Flammable Liquid Flash Point:</b>	31°C
<b>Percent Volatiles:</b>	25 – 55w/w
<b>Water Miscibility:</b>	Immiscible
<b>Flammable Limits:</b>	LEL 1.1% UEL 6.1%

## 10. Stability and Reactivity

<b>Stability:</b>	Potentially unstable – may polymerise producing heat if stored incorrectly.
<b>Conditions to avoid:</b>	Exposure to sunlight, open flames, contamination and prolonged storage above 30°C.
<b>Materials to avoid:</b>	Strong acids, peroxides, other oxidising agents, transition metals e.g. copper and zinc, their alloys and galvanised items.

**Hazardous** May occur as result of high temperature or contamination, if burned,  
**Polymerisation:** These products will evolve black, acrid smoke along with carbon monoxide, carbon dioxide and various organic compounds.

#### 11. Toxicological Information

When used under properly controlled conditions, within workplace exposure limits and with adequate protective equipment, no adverse health effects are to be expected.

##### **Acute effects of over exposure.**

**If Swallowed:** Harmful by ingestion. Possible irritation of mucous membranes, nausea, vomiting and gastric disturbance. Possible depression of central nervous system. Aspiration into lungs could cause pneumonitis which may damage lungs or may be fatal.

**Eye Contact:** Product is irritating to the eyes.

**Skin Contact:** Irritant. May cause itching and redness of skin.

**Inhalation of Vapour:** May cause headaches, nausea, irritation to the respiratory tract.

##### **Chronic effects of overexposure:**

Mild dermatitis may result from prolonged or repeated skin contact. Styrene can be absorbed through the skin. Seek medical advice

Excessive exposure to the liquid material or vapour may affect the central nervous system, damaging fertility or to the unborn child, may cause cancer and is toxic to organs.

#### 12. Ecological Data

Prevent these products from entering storm-water drains sewers or waterways. It is toxic to aquatic organisms.

Styrene is the major contaminant hazard in these formulations and it will undergo slow (but near complete) biodegradation in contact with soil. Styrene vapour degrades rapidly in the atmosphere.

Styrene floats on water and will vaporise and biodegrade.

H401	Toxic to aquatic life.
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#### 13. Disposal Considerations

Waste Disposal: Small quantities of these products may be mixed with appropriate amounts of polymerization initiators (catalyst) and allowed to solidify before disposal as solid waste. Recover or recycle if possible. This material and its container must be disposed of as hazardous waste. Any disposal must be labelled as such and comply with applicable local and national government regulations. Ensure that these materials do not enter drains, sewers or waterways. Ensure that empty packaging is managed in accordance with Dangerous Goods and HSNO regulations.

P501	Dispose of product and packaging in accordance with local/national regulations
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**Dangerous Goods Classification** 3

**Packing Group** III

**Hazchem Code** 3Y

## 14. Transport Information

Transport according to NZS5433 (Transport of Hazardous Substances on land), considered a dangerous good for transport.

UN Number:	1866
Proper Shipping Name:	Resin Solution, Flammable
Hazchem Code:	3Y
Dangerous Goods Class:	Class 3
Packing Group:	III
Tunnel Restriction:	D
EMS Number	F-E, S-E
ERG Code	127

## 15. Regulatory Information

Additives, Process Chemicals and Raw Materials (Flammable, Acutely Toxic, Corrosive) Group Standard 2020

SDS To be available within 10 minutes when required;

## 16. Other Information

This SDS contains only safety-related information. For other data see product literature.

Fire/Ambulance/Police NZ	111
Approval Code	HSR002501
STEL	Short term exposure limit, maximum airborne concentration to which a worker may be exposed to in any 15-minute period.
TWA	Time Weighted Average based on an 8-hour workday
UN Number	United Nation Number
EPA	Environmental Protection Agency
LEL 1.1%	Lower Flammability Level
UEL 6.1%	Upper Flammability Level
ERG	Emergency Response Guide
EMS	Emergency Response for Shipping
Other References	Manufactures/supplier SDS's
Review: 8 April 2021	Reason: Update to GHS and pictograms

**Disclaimer:** The information given in this safety data sheet is given in good faith and is believed to be valid and accurate at the time of publication. However, no responsibility is accepted for accident or injury which may occur from omissions or from information contained in the data sheet.

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