



# SAFETY DATA SHEET

Issue Date 14-May-2018

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Version 3

## Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

### Product identifier

**Product Name** POLYPLEX CLEAR ORTHO CASTING RESIN

### Other means of identification

**UN Number** UN1866

### Recommended use of the chemical and restrictions on use

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

### Details of manufacturer or importer

#### Manufacturer

Allnex Composites  
(a division of Allnex Resins Australia Pty Ltd)  
49-61 Stephen Road  
Botany  
NSW 2019

### For further information, please contact

**Contact Point** +61 (02) 9666 0331  
**E-mail address** complianceANZ@allnex.com

### Emergency telephone number

**Emergency telephone number** +61 1800 022 037

## Section 2: HAZARD(S) IDENTIFICATION

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonised System (GHS)

### GHS Classification

<b>Flammable liquids</b>	Category 3 - (H226)
<b>Reproductive toxicity</b>	Category 2 - (H361)
<b>Specific target organ toxicity (repeated exposure)</b>	Category 1 - (H372)
<b>Specific target organ toxicity (single exposure)</b>	Category 3 - (H335)
<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Aspiration toxicity</b>	Category 1 - (H304)

### Label elements



Signal word

Danger

**Hazard statements**

H226 - Flammable liquid and vapour  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H361 - Suspected of damaging fertility or the unborn child  
 H372 - Causes damage to organs through prolonged or repeated exposure

**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  
 Wash face, hands and any exposed skin thoroughly after handling  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapours/spray  
 Do not eat, drink or smoke when using this product  
 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): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before re-use  
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Immediately call a POISONS INFORMATION CENTRE or doctor  
 Do NOT induce vomiting  
 In case of fire: Use CO<sub>2</sub>, 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**

Harmful to aquatic life with long lasting effects  
 Toxic to aquatic life

**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
Non-hazardous ingredients	Balance	

<b>Section 4: FIRST AID MEASURES</b>
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Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Emergency telephone number</b>	Poisons Information Centre, Australia: 13 11 26
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary oedema may occur. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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. Immediate medical attention is required. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
<b>Self-protection of the first aider</b>	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

<b>Symptoms</b>	Difficulty in breathing. Coughing and/or wheezing. Dizziness. Burning sensation.
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Indication of any immediate medical attention and special treatment needed

<b>Note to doctors</b>	Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.
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<b>Section 5: FIREFIGHTING MEASURES</b>
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Suitable Extinguishing Media**Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol-resistant foam. Water spray.**Unsuitable extinguishing media**



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** . This product, as supplied, contains hazardous materials with occupational exposure limits.

Chemical Name	Australia
Styrene 100-42-5	50 ppm TWA 213 mg/m <sup>3</sup> TWA 100 ppm STEL 426 mg/m <sup>3</sup> STEL

**Biological occupational exposure limits** An occupational medicine specialist familiar with national and regional regulations and standards must be consulted to establish a program of medical examinations for workers exposed to substances with biological limit values

Chemical Name	Australia	ACGIH	United Kingdom	European Union
Styrene 100-42-5	-	Mandelic acid plus phenylglyoxylic acid: 400 mg/g creatinine urine end of shift Styrene: 40 µg/L urine end of shift	-	

#### 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.

<b>Section 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid
<b>Appearance</b>	clear Hazy
<b>Colour</b>	clear
<b>Odour</b>	Characteristic Styrene
<b>Odour threshold</b>	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		No information available
Dynamic viscosity		No information available
Explosive properties	No information available	
Oxidising properties	No information available	

**Other Information**

<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available

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

<b>Section 10: STABILITY AND REACTIVITY</b>
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**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.

**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**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Aspiration into lungs can produce severe lung damage. May cause pulmonary oedema. Pulmonary oedema can be fatal.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). Repeated exposure may cause skin dryness or cracking.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary oedema and pneumonitis.

**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)** 30.40

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**

May be fatal if swallowed and enters airways.

**Section 12: ECOLOGICAL INFORMATION****Ecotoxicity****Unknown Aquatic Toxicity**

0.02253% 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**

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

**Section 13: DISPOSAL CONSIDERATIONS**Waste treatment methods

<b>Waste from residues/unused products</b>	Refer to all federal, state and local regulations prior to disposal of container and unused contents by re-use, recycle or disposal.
<b>Contaminated packaging</b>	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**ADG

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

IMDG

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

**Transport in Bulk According to Annex II of MARPOL and the IBC CODE**

No information available

IATA

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

**Section 15: REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations**Australia**

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail

(ADG). Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonised System (GHS)

See section 8 for national exposure control parameters

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

#### Poison Schedule Number

S5

**Major hazard (accident/incident planning) regulation** Verify that license requirements are met

<u>Hazardous chemical category</u>	<u>Threshold quantity (T)</u>
Liquids that meet the criteria for Class 3 Packing Group II or III	50 000
Liquids with flash points <61°C kept above their boiling points at ambient conditions	200

#### International Inventories

<b>AICS</b> - Australian Inventory of Chemical Substances	Listed or exempt
<b>DSL</b> - Canadian Domestic Substances List	Listed or exempt
<b>IECSC</b> - China Inventory of Existing Chemical Substances	Listed or exempt
<b>ENCS</b> - Japan Existing and New Chemical Substances	Not listed
<b>KECL</b> - Korean Existing and Evaluated Chemical Substances	Listed or exempt
<b>NZIoC</b> - New Zealand Inventory of Chemicals	Listed or exempt
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances	Listed or exempt
<b>CICR</b> - Turkey Chemical Inventory Control Regulation	No information available
<b>NCSR</b> - Taiwan National Chemical Substance Registry	No information available
<b>TSCA</b> - 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](mailto: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** 14-May-2018

**Revision Note** SDS sections updated  
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**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**