

SAFETY DATA SHEET

Issue Date 28-Sep-2017 Revision Date 05-Jul-2017 Version 2

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name WAX IN STYRENE - C1501

Other means of identification

UN Number UN1993

Recommended use of the chemical and restrictions on use

Recommended Use Recommended for Industrial and/or Professional use only

Details of manufacturer or importer

<u>Manufacturer</u>

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

Flammable liquids	Category 3 - (H226)
Reproductive toxicity	Category 2 - (H361)
Acute toxicity - Inhalation (Vapours)	Category 4 - (H332)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Aspiration toxicity	Category 1 - (H304)

Label elements

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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 eve 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

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

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 eve 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 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

Harmful to aquatic life with long lasting effects

Toxic to aquatic life

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

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Not applicable

Mixture

 Chemical Name
 CAS No
 Weight-%

 Styrene
 100-42-5
 60-100

 Paraffin waxes and Hydrocarbon waxes
 8002-74-2
 5-<10</td>

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, Australia: 13 11 26

Inhalation 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.

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. 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.

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 Difficulty in breathing. Coughing and/or wheezing. Dizziness. Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to doctors

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.

Section 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable extinguishing media

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

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Unsuitable extinguishing media

Do not use water jetstream

Specific hazards arising from the chemical

Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers. Those substances designated with a "P" may polymerise explosively when heated or involved in a fire. Run-off to sewer may create fire or explosion hazard. Substance may be transported hot. 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

•3Y.

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

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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.

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. Keep out of the reach of children. Store locked up. 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	50 ppm TWA
100-42-5	213 mg/m³ TWA
	100 ppm STEL
	426 mg/m ³ STEL
Paraffin waxes and Hydrocarbon waxes 8002-74-2	2 mg/m³ TWA

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	-	Mandelic acid plus	-	
100-42-5		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.

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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

No information available

hPa, 20°C

insoluble

Information on basic physical and chemical properties

Physical state liquid
Appearance clear Hazy
Colour colourless
Odour Characteristic

Odour threshold No information available

PropertyValuesRemarks • MethodpHNo information availableMelting point / freezing pointNo information availableBoiling point/boiling range145 °CPolymerisation can occurFlash point31 °CTag Closed Cup

No information available

No information available

Evaporation rate 0.49
Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit: 6.1 % Lower flammability limit: 1.1 %

Vapour pressure 6 Vapour density 3.6 Relative density 0.90

Relative density Water solubility

Water solubility
Solubility(ies)

Partition coefficient
Auto-ignition temperature
Decomposition temperature
Kinematic viscosity

Dynamic viscosity Explosive properties

Oxidising properties
Other Information

VOC Content (%)

Density

No information available

No information available

Section 10: STABILITY AND REACTIVITY

Reactivity

No Data Available.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

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

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

Inhalation 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.

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). Repeated exposure may cause skin dryness or cracking.

Ingestion 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) 12.20 ATEmix (inhalation-dust/mist) 1.50

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

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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% 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

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Chemical Name	Partition coefficient
Styrene	2.95

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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

ADG

UN Number UN1993

Proper shipping name FLAMMABLE LIQUID, N.O.S.

Description UN1993, FLAMMABLE LIQUID, N.O.S. (Styrene), 3, III

Hazard Class 3
Packing Group III
Special Precautions for users 223, 274
Hazchem code •3Y.
IERG 14

IMDG

UN/ID no UN1993

Proper shipping name FLAMMABLE LIQUID, N.O.S.

Description UN1993, FLAMMABLE LIQUID, N.O.S. (Styrene), 3, III, (31°C C.C.)

Hazard Class 3
Packing Group III
EmS-No F-E, S-E
Special Precautions for users 223, 274, 955

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

No information available

<u>IATA</u>

UN/ID no UN1993

Proper shipping name Flammable liquid, n.o.s.

Description UN1993, Flammable liquid, n.o.s. (Styrene), 3, III

Hazard Class 3
Packing Group III
ERG Code 3L

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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

Hazardous chemical category

Threshold quantity (T)

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

AICS - Australian Inventory of Chemical Substances	Listed or exempt
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DSL - Canadian Domestic Substances List Listed or exempt

IECSC - China Inventory of Existing Chemical Substances

Not listed

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

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Revision Date 05-Jul-2017

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

Disclaimer

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End of Safety Data Sheet

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