

Crane SunPatch Kit

SECTION 1: IDENTIFICATION

GHS product identifier Fiberglass Patch – Light Cure Vinyl Ester Prepreg
 Product type Light Cure Vinyl Ester Prepreg
 Product use Industrial
 Manufactured for Crane Composites, Inc. |
 23525 W Eames Street | Channahon, IL 60410
 Contact 1.800.435.0080
 In case of emergency Chemtrec 1.800.424.9300
 Date of Revision 1/9/2017
 Print Date 02/10/2016

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW FLAMMABLE LIQUID AND VAPOR. AVOID EYE CONTACT WITH VAPOR, SPRAY, OR MIST. AVOID SKIN CONTACT. AVOID BREATHING OF VAPORS. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. WASH EXPOSED AREAS THOROUGHLY WITH SOAP AND WATER. HARMFUL IF SWALLOWED. ALSO HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.

GHS Classification Acute Tox. 4 Inhalation, Eye Irrit. 2, Flam. Liq. 3, Repr. 2, Skin Irrit. 2, STOT RE 1

Symbol(s) of Product 

Signal word Danger

GHS label elements		
Flammable Liquid, category 3 Skin Irritation, category 2	H226 H315 H319	Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation.
Eye Irritation, category 2 Acute Toxicity, Inhalation, category 4 Reproductive Toxicity, category 2	H332 H361	Harmful if inhaled. Suspected of damaging fertility or the unborn child. Classified Category 2 suspected human reproductive toxicant irreversible effects such as structural malfunctions, embryo/fetal lethality, post-natal functional deficiencies.
STOT, repeated exposure, category 1	H372	Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P270	Do not eat, drink or smoke when using this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	%
Styrene	100-42-5	20 – 30
Vinylester Resin	Proprietary	20 – 30
Fiberglass	65997-17-3	45 – 55

GHS Symbols GHS02-GHS07- GHS08

GHS Statements H226-302-315-319-332-361-372

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

SECTION 4: FIRST AID MEASURES

Eye contact	Hold eyelids apart and immediately flush with plenty of water for 15 minutes. Seek medical advice. Remove contact lenses.
Inhalation	Remove to fresh air. If not breathing, administer CPR until help arrives or the victim starts to breathe on his own. If breathing is difficult, give oxygen. Seek medical attention immediately.
Skin Contact	Immediately flush with water for at least 15 minutes. Remove contaminated clothing. Seek medical attention immediately. Wash thoroughly after handling.
Ingestion	Rinse mouth with water. Never give anything by mouth to an unconscious person. Obtain medical attention. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Dry Chemical, CO₂, Water

Unsuitable extinguishing media Fog/Mist, Foam Water Jet

Special firefighting procedures Wear full protective gear & SCBA

Unusual fire and explosion hazards Flammable liquid. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Container may rupture on heating.

Environmental measures Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Steps to be taken in case material is released or spilled Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or water courses. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Precautionary measures Put on appropriate personal protective equipment (see Section 8). Do not touch or walk through spilled material. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up

Methods for Containment Prevent spilled material from 1) contaminating soil, 2) entering sanitary sewers, storm sewers, and drainage systems, and 3) entering bodies of water or ditches that lead to waterways. Prevent spreading over a wide area (e.g. by containment or oil barriers).

Methods for Clean-up Soak up with inert absorbent material. Remove from surface water (e.g. by skimming or siphoning). Dispose of contaminated material as waste according to item 13.

SECTION 7: HANDLING AND STORAGE**Handling**

Flammable liquid. Avoid heat, sparks and open flames. Avoid breathing vapor and contact with eyes, skin and clothing. Do not leave containers open. Avoid repeated or prolonged contact with skin. Empty containers retain product residue. Observe all safety precautions. Do not reuse container.

Storage

Keep away from oxidizers, heat or flames. Keep in cool, dry, ventilated storage and in closed containers. Store away from all ignition sources. Ground all containers during transfer. Store in a cool, dry place. Keep container close. Protect from damage. Store away from flame and ignition sources. Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. Store in upright position only.

Hygienic practices

General industrial hygiene practice. Wash hands before eating, drinking, or smoking.

Work practices

Put on appropriate personal protective equipment. Wash hands after handling chemicals and before eating, drinking, or smoking. Read and understand entire SDS before handling chemical.

Special handling procedures

Put on appropriate personal protective equipment. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Follow US NFPA 30, "Flammable and Combustible Liquids Code", or other national, state and local codes on safe handling of flammable liquids. Train workers in the recognition and prevention of hazards associated with the storage, handling, and transfer of flammable liquids in the plant. Empty containers retain product residue and can be hazardous.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure limits**

Components with workplace control parameters

Styrene (CAS #: 100-42-5)

ACGIH TLV	20 ppm TWA 40 ppm STEL
OSHA PEL	A4 Not Classifiable as a Human Carcinogen 100 ppm TWA 200 ppm Ceiling
Industry PEL	While the federal workplace exposure limit for styrene is 100 ppm, OSHA accepted the styrene industry's proposal to voluntarily meet a PEL of 50 ppm on an 8 hour TWA and a Short Term Exposure Limit (STEL) of 100 ppm, 15 minute exposure.

Canada - Alberta OELs	40 ppm STEL 170 mg/m ³ STEL
Canada - Ontario OELs	20 ppm TWA 85 mg/m ³ TWA
Canada - British Columbia OELs	35 ppm TWA 100 ppm STEL
NIOSH IDLH	50 ppm TWA 75 ppm STEL 700 ppm Immediately dangerous to life or health IDLH
Mexico OEL	100 ppm STEL 425 mg/m ³ STEL 50 ppm TWA 215 mg/m ³ TWA (skin)

Legend

ACGIH = American Conference of Governmental Industrial Hygienists

TLV® = Threshold Limit Value

TWA = Time-weighted average

STEL = Short Term Exposure Limit

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

OEL = Occupational Exposure Limit

NIOSH = National Institute for Occupational Safety and Health

IDLH = Immediately Dangerous to Life or Health

SKIN = Skin Absorption

Personal Protection

Respiratory protection



Use a properly-fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Skin protection



Chemical resistant gloves and chemical goggles should be used to prevent skin and eye contact. Impervious gloves.

Eye protection



Safety glasses with side-shields. Avoid contact with eyes.

Other protective equipment



Use good hygiene practices. Wash face and hands before eating, drinking, and smoking. Eye wash and safety showers should be readily available.

Hygienic practices



General industrial hygiene practice. Wash hands before eating, drinking, or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIESAppearance

Physical state	Viscous liquid.
Color	Reddish-brown
Odor	Styrene
Odor threshold	Not Available
Density, g/cm ³	1.100
pH	Not available.
Freeze point, °C	Not available.
Viscosity	Not available.
Solubility in water	Negligible
Partition coefficient, n-octanol / water	Not available.
Decomposition temp, °C	Not available.
Flash point, °C / °F	30 / 86
Boiling range, °C	83
Vapor pressure	Not available.
Explosive limits, vol %	Not available.
Auto-ignition temp, °C	Not Available (See "Other information" Section for abbreviation legend)

SECTION 10: STABILITY AND REACTIVITY

Stability	This material is stable under normal storage and handling conditions.
Conditions to avoid	High temperatures, sparks, open flame, and all other sources of ignition. Avoid heat, sparks, flames and other ignition sources.
Incompatibility	Keep away from strong oxidizing agents.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use.

SECTION 11: TOXICOLOGY INFORMATIONPractical experiences

Eye contact	Moderate irritation including redness, swelling, pain, tearing and hazy vision. May cause irritation, discomfort, reddening and tearing.
Ingestion	May cause irritation of the respiratory tract and CNS effects such as dizziness, headaches, nausea and narcosis.
Inhalation	Inhalation of high concentrations may cause headache, nausea, and dizziness.
Skin contact	Prolonged contact may cause irritation and/or redness.
Chronic hazards	No Information
Carcinogenicity	No Information
Primary route(s) of entry	Eye Contact, Ingestion, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS number	Name according to EEC	Oral LD50	Dermal LD50	Vapor LC50
100-42-5	Styrene	1000 mg/kg Rat	> 5000 mg/kg	11.7 mg/L Rat

N.I. = No Information

SECTION 12: ECOLOGICAL INFORMATION**Ecological information**

Ecological evaluation of this material has not been performed; however, do not allow the product to be released to the environment without governmental approval/permits. Discharge into the environment must be avoided.

SECTION 13: DISPOSAL CONSIDERATION**Disposal methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

SECTION 14: TRANSPORT INFORMATION**Special transport precautions**

No information

International transport regulations

Regulatory Information	UN/NA Number	Proper Shipping Name	Classes/*PG	Reportable quantity (RQ)
CFR	UN 1866	Resin Solution, flammable	Class 3 PG III	No Information
IMO/IMDG	UN 1866	Resin Solution, flammable	Class 3 PG III	No Information
IATA (Cargo)	UN 1866	Resin Solution, flammable	Class 3 PG III	No Information

SECTION 15: REGULATORY INFORMATION**U.S. Federal regulations****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Chemical Name	CAS number
Styrene	100-42-5

SARA Section 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS number
Styrene	100-42-5

California Proposition 65:

Warning: This product contains a chemical known to the State of California to cause cancer.

Toxic substances control act

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

STATE REGULATIONS**Massachusetts**

The following hazardous materials are listed:

Chemical Name	CAS number
Styrene	100-42-5
Isopropanol	67-63-0
Hydroquinone	123-31-9
2,5 Cyclohexadiene-1, 4-dione	106-54-4
Fiberglass mat	

New Jersey

The following hazardous materials are listed:

Chemical Name	CAS number
Styrene	100-42-5
Isopropanol	67-63-0
Hydroquinone	123-31-9
2,5 Cyclohexadiene-1, 4-dione	106-54-4
Fiberglass mat	

Pennsylvania

The following hazardous materials are listed:

Chemical Name	CAS number
Isopropanol	67-63-0
Hydroquinone	123-31-9
2,5 Cyclohexadiene-1, 4-dione	106-54-4

INTERNATIONAL REGULATIONS**Canadian WHMIS**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class

B2, D2B

Canada inventory**Australia inventory (AICS)**

All components are listed or exempted

Canada inventory (DSL)

All components are listed or exempted

Japan Inventory (ENCSC)

All components are listed or exempted

China Inventory (IECSC)

All components are listed or exempted

Korea Inventory (KECI)

All components are listed or exempted

New Zealand (NZIoC)

Not Determined

Philippines (PICCS)

Not Determined

United States Inventory (TSCA 8b)

All components are listed or exempted

SECTION 16: OTHER INFORMATION**Hazardous Material Information System (U.S.A.)**

Health	2
Flammability	3
Reactivity	1
Personal Protection	N.I.
Chronic Rating	N.I.

Volatile Organic Compounds, gr/ltr 0

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361	Suspected of damaging fertility or the unborn child. Classified Category 2 suspected human reproductive toxicant irreversible effects such as structural malfunctions, embryo/foetal lethality, post natal functional deficiencies.
H372	Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS07



GHS08



Legend

N.A. = Not Applicable
 N.E. = Not Established
 N.D. = Not Determined
 N.I. = No Information

Notice to reader

The information provided herein was believed by Polynt Composites USA, Inc. to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Polynt Composites USA, Inc. are subject to Polynt Composites USA, Inc terms and conditions of sale. Polynt Composites USA, Inc. MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY Polynt Composites USA, Inc, except that the product shall conform to Polynt Composites USA, Inc. specifications. Nothing contained herein constitutes an offer for the sale of any product.