

## SAFETY DATA SHEET

Safety Data Sheet according to regulation (EC) No 1907/2006 & 1272/2008 and amendments

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**Product Identifier:** SOLAREZ® Polyester Grain Sealer radiation curing resins  
**Product Description:** microsphere filled Polyester acrylate resin (SKU 71209, 71409, 71509)

#### RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

**Intended/Recommended Use:** Coatings

#### DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

**Company:** WAHOO INTERNATIONAL, INC. 1315 Hot Springs Way #16 VISTA, CA 92081 USA  
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#### EMERGENCY PHONE

1-800-875-3833

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### 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**Classification according to Regulation (EC) No 1272/2008 and amendments**

Serious Eye Damage / Eye Irritation Hazard Category 2

Skin Sensitizer Hazard Category 1

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Xi - Irritant

R36 - Irritating to eyes.

R43 - May cause sensitization by skin contact.

#### LABEL ELEMENTS

**Signal Word** -Warning

#### Hazard Statements

H319 - Causes serious eye irritation.

H317 - May cause an allergic skin reaction.

#### Precautionary Statements

Precautionary statements on the label will be reduced as indicated in Regulation (EC) No 1272/2008, Article 28.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P321 - Specific treatment (see supplemental first aid instructions on this label).

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P501 - Dispose of contents/container in accordance with local and national regulations.

#### OTHER HAZARDS

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight.

## RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Mixture

Component / CAS No.	%	EC-No	REACH Registration Number	Classification	Classification according to Regulation (EC) No 1272/2008 (CLP)
Acrylated resin	40 - 70	-	Not available	Xi; R36	Eye Irrit. 2 (H319)
Glycerol propoxylated, esters with acrylic acid 52408-84-1		-	01-2119487948-12	Xi;R36 R43	Eye Irrit. 2 (H319) Skin Sens. 1 (H317)
Styrene 100-42-5	15-20	202-851-5	01-2119452449-31	R10, R20, R36/38	H226: Flammable liquid and vapor. HEALTH HAZARDS: H332: Harmful if inhaled. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H315: Causes skin irritation. H372: Causes damage to organs through prolonged or repeated exposure. H304: May be fatal if swallowed and enters airways. ENVIRONMENTAL HAZARDS: Not classified as environmental hazard according to CLP criteria.D
Glass microspheres 65997-17-3	10-25	266-046-0	NA	NA	NA
2,4,6-Trimethylbenzoyldiphenylphosphine oxide 75980-60-8	<5	NA	NA	NA	NA
Acrylic acid 79-10-7	< 0.3	201-177-9	01-2119452449-31	R10 Xn; R20/21/22 C; R35 N; R50	Flam. Liq. 3 (H226) D Acute Tox. 4 (H302) D Acute Tox. 4 (H312) D Acute Tox. 4 (H332) D Skin Corr. 1A (H314) D Aquatic Acute 1 (H400) D

### 4. FIRST AID MEASURES

#### DESCRIPTION OF FIRST AID MEASURES

##### Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

##### Skin Contact:

Wash immediately with plenty of water and soap. Remove contaminated clothing and shoes without delay. Obtain medical attention. Do not reuse contaminated clothing without laundering. Destroy or thoroughly clean shoes before reuse.

##### Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

##### Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

#### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

#### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

##### General Information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

### 5. FIRE-FIGHTING MEASURES

## EXTINGUISHING MEDIA

### Suitable Extinguishing Media:

Use water spray or fog, carbon dioxide or dry chemical.

### Extinguishing Media to Avoid:

high pressure water jet.

## SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Keep containers cool by spraying with water if exposed to fire.

## ADVICE FOR FIREFIGHTERS

### Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing.

See MSDS Section 8 (Exposure Controls/Personal Protection).

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures:

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

### Environmental Precautions:

None known

### Methods and material for containment and cleaning up:

Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

### References to other sections:

See Sections 8 and 13 for additional information.

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## 7. HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

**Precautionary Measures:** Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated contact with skin. Use with adequate ventilation. Keep container tightly closed. Wash thoroughly after handling.

**Special Handling Statements:** Provide good ventilation of working area (local exhaust ventilation if necessary).

### Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well-ventilated place and keep container tightly closed. Keep away from heat sources and direct sunlight.

**Storage Temperature:** Store at 4 - 40 °C

**Reason:** Quality.

**VCI Storage Class:** 10

**Specific end use(s):** Composite field repair.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### CONTROL PARAMETERS

#### 79-10-7 Acrylic acid

United Kingdom: WEL (Workplace Exposure Limits)	Not established
Europe ILV (Indicative Limit Values):	Not established
Other Value:	1 ppm skin (Cytec)

Use	Route	DNEL	Units	Effects Type
Glycerol propoxylated, esters with acrylic acid (52408-84-1)				
Industrial	Dermal	1.92	mg/kg/day	Long term, systemic
Industrial	Inhalation	16.2	mg/m <sup>3</sup>	Long term, systemic
Professional	Dermal	1.15	mg/kg/day	Long term, systemic
Professional	Inhalation	4.87	mg/m <sup>3</sup>	Long term, systemic
Professional	Oral	1.39	mg/kg/day	Long term, systemic

Compartment	PNEC	Units
Glycerol propoxylated, esters with acrylic acid (52408-84-1)		

Fresh water	0.00574	mg/L
Marine water	0.000574	mg/L
Intermittent water release	0.0574	mg/L
Sediment	0.01697	mg/kg
Soil	0.00111	mg/kg
Sewage treatment plant	10	mg/L

## EXPOSURE CONTROLS

### Engineering Measures:

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure when spraying or curing at elevated temperatures.

### Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required.

Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

A full facepiece respirator also provides eye and face protection.

Cutting, grinding or sanding of parts fabricated after curing may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to components listed above for potential hazardous components in the dust.

### Eye protection:

Wear eye/face protection such as chemical splash proof goggles or face shield.

Eyewash equipment and safety shower should be provided in areas of potential exposure.

### Skin Protection:

Avoid skin contact.

Wear impermeable gloves and suitable protective clothing.

Barrier creams may be used in conjunction with the gloves to provide additional skin protection.

### Hand protection:

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

### Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use.

Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Colour:</b>	translucent white
<b>Appearance:</b>	translucent white cream
<b>Odor:</b>	ester-like
<b>Odor Threshold:</b>	See Section 8 for exposure limits.
<b>pH:</b>	Not available
<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	>100 °C
<b>Flash point:</b>	>100 °C Setaflash Closed Cup
<b>Evaporation Rate:</b>	Not available
<b>Flammable Limits (% By Vol):</b>	Not applicable
<b>Vapor Pressure:</b>	<1.33 hPa @ 20 °C
<b>Vapour density:</b>	Not available
<b>Specific Gravity/Density:</b>	1.09 g/cm <sup>3</sup>
<b>Solubility In Water:</b>	slightly soluble
<b>Partition coefficient (noctanol/water):</b>	Not available
<b>Autoignition temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Viscosity (Kinematic):</b>	Not available
<b>Viscosity (Dynamic):</b>	600 - 900 mPa.s @ 25 °C medium viscous liquid

### OTHER INFORMATION

<b>Fat Solubility (Solvent-Oil):</b>	Not available
<b>Percent Volatile (% by wt.):</b>	<0.5
<b>Solids Content:</b>	Not available

<b>Saturation In Air (% By Vol.):</b>	Not available
<b>Acid Number (mg KOH/g):</b>	Not applicable
<b>Hydroxyl Value (mg KOH/g):</b>	Not available
<b>Volatile Organic Content (1999/13/EC):</b>	

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## 10. STABILITY AND REACTIVITY

**Reactivity:** No information available

### CHEMICAL STABILITY

**Stability:** Stable

**Conditions To Avoid:** Avoid direct exposure to sunlight. Avoid temperatures above 60°C (140°F). Avoid friction with temperature increase as result. Avoid exposure to strong UV sources.

Loss of dissolved air. Loss of polymerization inhibitor. Avoid direct contact with heat sources.

### POSSIBILITY OF HAZARDOUS REACTIONS

**Polymerization:** May occur

**Conditions To Avoid:** Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers.

Hazardous polymerization can occur when exposed to direct sunlight. Hazardous exothermic polymerization can occur when heated. Avoid contact with bases or amines. Avoid contact with strong oxidizing agents. Avoid contact with free radical initiators.

**Incompatible materials:** Avoid contact with peroxides. Copper, copper alloys, carbon steel, iron and rust.

Avoid free radical producing initiators. Contact with alkalis. They give an exothermic reaction with the product.

Unintentional contact with them should be avoided. Avoid contact with active metals. Hazardous polymerization may occur.

### Hazardous Decomposition

#### Products:

oxides of carbon

smoke

hydrocarbons

soot

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## 11. TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Eyes, Skin, Oral.

**Acute toxicity - oral:** Not classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Acute toxicity - dermal:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Acute toxicity - inhalation:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Skin corrosion / irritation:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Serious eye damage / eye irritation:** Causes serious eye irritation.

**Respiratory sensitization:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Skin sensitization:** May cause an allergic skin reaction.

**Carcinogenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Germ cell mutagenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Reproductive toxicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Aspiration hazard:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

## PRODUCT TOXICITY INFORMATION

### ACUTE TOXICITY DATA

Oral	rat	Acute LD50	>2000 mg/kg
Dermal	rabbit	Acute LD50	>2000 mg/kg
Inhalation	rat	Acute LDC50 4 hr	>5 mg/l

### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	eye	irritating (tested)
Acute Irritation	dermal	Not irritating

### ALLERGIC SENSITIZATION

Sensitization	respiratory	No data
Sensitization	Skin	Sensitizing

### GENOTOXICITY

#### Assays for Gene Mutations

Ames Salmonella Assay	No data
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### OTHER INFORMATION

The toxicity data above are the results from Cytec sponsored studies or from the available public literature.

The toxicological properties of this material have not been fully determined.

Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms such as redness, blistering, dermatitis, etc.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

### HAZARDOUS INGREDIENT TOXICITY DATA

Acrylated resin has an acute oral (rat) and dermal toxicity (rabbit) LD50 values of >2000 mg/kg and > 2000 mg/kg, respectively. Eye contact can cause serious corneal opacity, considerable redness and oedema. Skin irritation - no dermal reactions (OECD-PII= 0). Mutagenicity: negative in the Ames test, positive in the mouse lymphoma gene mutation test. In vitro mammalian chromosome aberration test: negative.

Glycerol propoxylated, esters with acrylic acid, CAS: 52408-84-1, Acute toxicity: LD50-oral rat >2000 mg/kg Acute toxicity: LD50-dermal, rabbit > 2000 mg/kg Eye irritation: serious corneal opacity, considerable redness and oedema. Skin irritation: no dermal reactions (OECD-PII= 0). This material may cause dermal sensitization. Mutagenicity: negative in the Ames test, positive in the mouse lymphoma gene mutation test. In vitro mammalian chromosome aberration test: negative. Long term toxicity: no data available.

Acrylic acid has an acute oral (rat) LD50, acute dermal (rabbit) LD50, and 4-hour inhalation (rat) LC50 values of 340-3200 mg/kg, ~280 mg/kg, and 4000 ppm (11.8 mg/L), respectively. Direct contact may cause severe eye and skin irritation. Inhalation overexposure may cause irritation of the respiratory tract and eyes. Prolonged or repeated exposure may cause allergic skin reactions.

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## 12. ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

The ecological properties of this material have not been fully investigated

### RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Acrylated resin	Not available		
Glycerol propoxylated, esters	Not available	Not available	Not available

with acrylic acid 52408-84-1			
Acrylic acid 79-10-7	EC50 0.04 mg/L - Desmodemus subspicatus (72h) EC50 0.17 mg/L - Pseudokirchneriella subcapitata (96h)	LC50 222 mg/L – Brachydanio rerio (96h)	LC50 270 mg/L - Daphnia magna (24h) EC50 95 mg/L - Daphnia magna (48h)

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## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

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## 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

### ADR/RID/ADN

Dangerous Goods? Not applicable/Not regulated

### IMO

Dangerous Goods? Not applicable/Not regulated

### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

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## 15. REGULATORY INFORMATION

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

**Ozone Depleting Substances (Regulation (EC) No 1005/2009):** Not applicable

**Persistent Organic Pollutants (Regulation (EC) No 850/2004):** Not applicable

**Substances subject to Authorization (Annex XIV of Regulation (EC) No 1907/2006):** Not applicable

**Water Endangering Class (Germany):** 2 according to VwVwS, 17.05.1999

### Inventory Information

#### United States (USA):

All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

#### Canada:

All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

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## 16. OTHER INFORMATION

Reasons for Issue: New Format

Classification methods include one or more of the following: use of specific product data, read-across data, modeling, professional judgment or a component based evaluation.

### Component Risk and Hazard Phrases

Acrylated resin

H319 - Causes serious eye irritation

R36 - Irritating to eyes.

Glycerol propoxylated, esters with acrylic acid

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

R36 - Irritating to eyes.

R43 - May cause sensitization by skin contact.

Acrylic acid

H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H332 - Harmful if inhaled.

H400 - Very toxic to aquatic life.

R10 - Flammable.

R35 - Causes severe burns.

R50 - Very toxic to aquatic organisms.

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

Styrene monomer

Flam. Liq. 3; H226

Acute Tox. 4; H332

Eye Irrit. 2; H319

Skin Irrit. 2; H315

Asp. Tox. 1; H304

STOT SE 3; H335

STOT RE 1; H372

According to Directive 67/548/EEC & Directive 1999/45/EC

Xn; R20, R48/20, R65 Xi; R36/37/38 R10

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