

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Solarshield Overprint Clear
 Product code : 6918+

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Polymeric US
 117 East 14th Avenue
 North Kansas City, MO 64116 - USA
 T 816-221-5567

1.4. Emergency telephone number

Emergency number : Chemtrec 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

: Warning

Hazard statements (GHS-US) :

: H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H319 - Causes serious eye irritation.
 H361 - Suspected of damaging fertility or the unborn child.
 H401 - Toxic to aquatic life
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS-US) :

: P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P261 - Avoid breathing mist, spray, vapours.
 P264 - Wash hands, forearms and face thoroughly after handling.
 P272 - Contaminated work clothing must not be allowed out of the workplace
 P273 - Avoid release to the environment.
 P280 - Wear eye protection, protective gloves.
 P302+P352 - If on skin: Wash with plenty of 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.

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P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
1,6-hexanediol diacrylate	(CAS-No.) 13048-33-4	30 - 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
isobornyl acrylate	(CAS-No.) 5888-33-5	10 - 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
tripropylene glycol diacrylate	(CAS-No.) 42978-66-5	<= 3.1875	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
TPO	(CAS-No.) 75980-60-8	2 - 5	Skin Sens. 1B, H317 Repr. 2, H361 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. When symptoms occur: go into open air and ventilate suspected area.
First-aid measures after skin contact : When symptoms occur: rinse immediately with plenty of water. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. 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.
First-aid measures after ingestion : Do NOT induce vomiting. Get immediate medical advice/attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Irritation of the eye tissue. Causes severe skin burns and eye damage.
Symptoms/effects after inhalation : Dry/sore throat. Irritation of the nasal mucous membranes. Irritation of the respiratory tract.
Symptoms/effects after skin contact : Blisters. Burns. Causes skin irritation. Cracking of the skin. Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Causes eye irritation. Causes serious eye irritation. Inflammation/damage of the eye tissue. Eye irritation.
Symptoms/effects after ingestion : Abdominal pain.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder. Adapt extinguishing media to the environment. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Reactivity : Polymerizes on exposure to light.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of fire: stop leak if safe to do so.

Protection during firefighting : Self-contained breathing apparatus. Complete protective clothing. [In case of inadequate ventilation] wear respiratory protection. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Absorb spillage to prevent material damage. Eliminate every possible source of ignition. Evacuate area.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

tripropylene glycol diacrylate (42978-66-5)

Not applicable

1,6-hexanediol diacrylate (13048-33-4)

Not applicable

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isobornyl acrylate (5888-33-5)

Not applicable

TPO (75980-60-8)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Colour	: Colourless
Odour	: acrylate odor
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 212 °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1064.05 g/l
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Polymerizes on exposure to light.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Heat.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

On burning: release of carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

tripropylene glycol diacrylate (42978-66-5)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, 14 day(s), Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male/female, Experimental value, Dermal)

1,6-hexanediol diacrylate (13048-33-4)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	3600 mg/kg (Rabbit, Dermal)
ATE US (dermal)	3600 mg/kg bodyweight

isobornyl acrylate (5888-33-5)	
LD50 oral rat	4890 mg/kg (Rat, Literature, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature, Dermal)
ATE US (oral)	4890 mg/kg bodyweight

TPO (75980-60-8)	
LD50 oral rat	> 2000 mg/kg (Rat; Literature)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
STOT-single exposure : Not classified

tripropylene glycol diacrylate (42978-66-5)	
STOT-single exposure	May cause respiratory irritation.

isobornyl acrylate (5888-33-5)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

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Symptoms/effects	: Irritation of the eye tissue. Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: Dry/sore throat. Irritation of the nasal mucous membranes. Irritation of the respiratory tract.
Symptoms/effects after skin contact	: Blisters. Burns. Causes skin irritation. Cracking of the skin. Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes eye irritation. Causes serious eye irritation. Inflammation/damage of the eye tissue. Eye irritation.
Symptoms/effects after ingestion	: Abdominal pain.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

tripropylene glycol diacrylate (42978-66-5)	
LC50 fish 1	4.5 - 10 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	89 mg/l (EU Method C.1, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)

isobornyl acrylate (5888-33-5)	
LC50 fish 1	0.704 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	1.98 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

TPO (75980-60-8)	
LC50 fish 1	1 - 10 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 48 h; Oryzias latipes)
EC50 Daphnia 1	10 - 100 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)
Threshold limit algae 1	> mg/l >10/100, EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Algae

12.2. Persistence and degradability

tripropylene glycol diacrylate (42978-66-5)	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable.

1,6-hexanediol diacrylate (13048-33-4)	
Persistence and degradability	Inherently biodegradable.

isobornyl acrylate (5888-33-5)	
Persistence and degradability	Not readily biodegradable in water.

TPO (75980-60-8)	
Persistence and degradability	Not readily biodegradable in water. No (test) data on mobility of the substance available.

12.3. Bioaccumulative potential

tripropylene glycol diacrylate (42978-66-5)	
Log Pow	2.77 (Experimental value, EU Method A.8: Partition Coefficient, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

1,6-hexanediol diacrylate (13048-33-4)	
Bioaccumulative potential	No bioaccumulation data available.

isobornyl acrylate (5888-33-5)	
BCF fish 1	37 (OECD 305: Bioconcentration: Flow-Through Fish Test, 56 h, Danio rerio, Flow-through system, Fresh water, Read-across, GLP)
Log Pow	4.52 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

TPO (75980-60-8)	
BCF fish 1	< 40 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; Cyprinidae sp.)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

tripropylene glycol diacrylate (42978-66-5)	
Log Koc	1 (log Koc, SRC PCKOCWIN v1.66, Calculated value)

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tripropylene glycol diacrylate (42978-66-5)

Ecology - soil : No (test)data on mobility of the substance available.

isobornyl acrylate (5888-33-5)

Ecology - soil : No (test)data on mobility of the substance available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Follow all local and state regulations regarding disposal. Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Sewage disposal recommendations : Keep out of sewers.
- Product/Packaging disposal recommendations : Discharging into rivers and drains is forbidden. Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
- UN-No.(DOT) : UN3082
- Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.
- Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
- Packing group (DOT) : III - Minor Danger
- Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



- Dangerous for the environment : Yes
- Marine pollutant : Yes



- DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
- DOT Packaging Bulk (49 CFR 173.xxx) : 241
- DOT Symbols : G - Identifies PSN requiring a technical name

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DOT Special Provisions (49 CFR 172.102)	: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies. 146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination. 173 - An appropriate generic entry may be used for this material. 335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leakproof when used as bulk packaging. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	: 171
Other information	: No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
UN-No. (IMDG)	: 3082
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG)	: 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG)	: III - substances presenting low danger
Limited quantities (IMDG)	: 5 L
Marine pollutant	: Yes



Air transport

Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III
UN-No. (IATA)	: 3082
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Class (IATA)	: 9 - Miscellaneous Dangerous Goods
Packing group (IATA)	: III - Minor Danger

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

toluene	CAS-No. 108-88-3	< 0.5%
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toluene (108-88-3)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	1000 lb
TPO (75980-60-8)	
EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance.

15.2. International regulations

No additional information available

15.3. US State regulations

WARNING: This product can expose you to toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
toluene(108-88-3)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Revision date : 11/13/2018

Other information : Polymeric urges the customer receiving this safety data sheet to study it carefully to become aware of the hazards, if any, in the product. In the interest of safety, the customer should (1) notify your employees, agents and contractors of the information included in this SDS and (2) furnish a copy to each of your employees, customers and agents. Polymeric makes no warranty, express or implied, as to the accuracy or reliability of information contained herein, except that such information is, to the best of Polymeric's knowledge and belief, accurate as of the date indicated on this document. Final determination of suitability of material is the sole responsibility of the user. All the materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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Full text of H-statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product