SAFETY DATA SHEET

TS381101

Section 1. Identification

Product name : Top Shield Elastomeric Sealant

White

Product code : TS381101

Other means of : Not available.

identification Product type

: Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : SRS Distribution Inc.

5900 S. Lake Forest Drive, Suite 400

McKinney, TX 75070-2196

Emergency telephone number of the company

: (216) 566-2917

Product Information Telephone Number

: (800) 348-7615

Regulatory Information Telephone Number

: (216) 566-2902

Transportation Emergency

(000) 404 0000

Telephone Number

: (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

CARCINOGENICITY - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 15%
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 62.5%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 62.

5%

GHS label elements

Hazard pictograms





Signal word : Dange

Hazard statements : Causes skin and eye irritation.

May cause cancer.

May cause respiratory irritation.
May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 11/19/2018 Version : 3 1/14

TS381101 Top Shield Elastomeric Sealant

White

Section 2. Hazards identification

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.

Response

: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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 attention.

Storage Disposal

: Store locked up.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number 127-18-4	
Tetrachloroethylene	≥25 - ≤50		
Isobutylene Polymer	≤10	9003-27-4	
Styrene-Hydrocarbon Copolymer	≤10	9011-11-4	
Hydrocarbon Polymer	≤3	62258-49-5	
1,2,4-Trimethylbenzene	<1	95-63-6	
Light Aromatic Hydrocarbons	<1	64742-95-6	
Titanium Dioxide	≤0.3	13463-67-7	
1,3,5-Trimethylbenzene	≤0.3	108-67-8	

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Date of issue/Date of revision: 5/24/2019Date of previous issue: 11/19/2018Version: 32/14TS381101Top Shield Elastomeric SealantSHW-85-NA-GHS-US

Section 4. First aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Date of issue/Date of revision: 5/24/2019Date of previous issue: 11/19/2018Version: 33/14TS381101Top Shield Elastomeric SealantSHW-85-NA-GHS-US

Section 4. First aid measures

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide halogenated compounds carbonyl halides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: 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).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Date of issue/Date of revision : 5/24/2019 Date of previous issue :11/19/2018 4/14 Version: 3 TS381101 SHW-85-NA-GHS-US Top Shield Elastomeric Sealant

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name Exposure limits	
Tetrachloroethylene	ACGIH TLV (United States, 3/2018). TWA: 25 ppm 8 hours. TWA: 170 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 685 mg/m³ 15 minutes. OSHA PEL Z2 (United States, 2/2013). TWA: 100 ppm 8 hours. CEIL: 200 ppm AMP: 300 ppm 5 minutes.
Isobutylene Polymer Styrene-Hydrocarbon Copolymer Hydrocarbon Polymer 1,2,4-Trimethylbenzene	None. None. None. ACGIH TLV (United States, 3/2018). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.
Light Aromatic Hydrocarbons Titanium Dioxide	None. ACGIH TLV (United States, 3/2018). TWA: 10 mg/m³ 8 hours. OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust
1,3,5-Trimethylbenzene	ACGIH TLV (United States, 3/2018). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.

Occupational exposure limits (Canada)

Date of issue/Date of revision 5/14 : 5/24/2019 Date of previous issue : 11/19/2018 Version: 3 TS381101 SHW-85-NA-GHS-US Top Shield Elastomeric Sealant White

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Tetrachloroethylene	CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 678 mg/m³ 15 minutes. 15 min OEL: 100 ppm 15 minutes. 8 hrs OEL: 25 ppm 8 hours. 8 hrs OEL: 170 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2018). TWA: 25 ppm 8 hours. STEL: 100 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2018). TWA: 25 ppm 8 hours. STEL: 100 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 25 ppm 8 hours. TWAEV: 170 mg/m³ 8 hours. STEV: 100 ppm 15 minutes. STEV: 685 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 100 ppm 15 minutes. TWA: 25 ppm 8 hours.
Titanium dioxide	CA British Columbia Provincial (Canada, 7/2018). TWA: 3 mg/m³ 8 hours. Form: Respirable dust TWA: 10 mg/m³ 8 hours. Form: Total dust CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 10 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Tetrachloroethylene	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 25 ppm 8 hours. STEL: 100 ppm 15 minutes.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Date of issue/Date of revision: 5/24/2019Date of previous issue: 11/19/2018Version: 36/14TS381101Top Shield Elastomeric SealantSHW-85-NA-GHS-US

Section 8. Exposure controls/personal protection

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available. : Not available. Odor : Not available. **Odor threshold**

pН : 8

Melting point/freezing point : Not available. **Boiling point/boiling range** : 121°C (249.8°F)

Flash point : Closed cup: >93.3°C (>199.9°F)

: 2.59 (butyl acetate = 1) **Evaporation rate**

Flammability (solid, gas) : Not available. Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : 2.4 kPa (18 mm Hg) [at 20°C]

Vapor density 5.83 [Air = 1]

: 1.21 **Relative density**

: Not available. Solubility Partition coefficient: n-: Not available.

octanol/water

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available.

Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt) **Viscosity**

Molecular weight Not applicable.

Aerosol product

Heat of combustion : 2.691 kJ/g

Date of issue/Date of revision 7/14 : 5/24/2019 Date of previous issue : 11/19/2018 Version: 3 TS381101 Top Shield Elastomeric Sealant SHW-85-NA-GHS-US

Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Tetrachloroethylene	LD50 Oral	Rat	2629 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Tetrachloroethylene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	162 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 810 milligrams	-
Light Aromatic Hydrocarbons	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
1,3,5-Trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Date of issue/Date of revision :11/19/2018 8/14 : 5/24/2019 Date of previous issue Version:3 TS381101 Top Shield Elastomeric Sealant

White

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Tetrachloroethylene	-	2A	Reasonably anticipated to be a human carcinogen.
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Tetrachloroethylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1,3,5-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	 Route of exposure	Target organs
Tetrachloroethylene Light Aromatic Hydrocarbons		Not determined Not determined

Aspiration hazard

Name	Result
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering

redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 11/19/2018 Version : 3 9/14

TS381101 Top Shield Elastomeric Sealant

White

Section 11. Toxicological information

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4704.3 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Tetrachloroethylene	Acute EC50 504 ppm Marine water Acute EC50 3.64 mg/l Fresh water	Algae - Skeletonema costatum Algae - Chlamydomonas reinhardtii - Exponential growth phase	96 hours 72 hours
	Acute EC50 7.49 mg/l Fresh water	Daphnia - Daphnia magna - Instar	48 hours
	Acute LC50 3.5 mg/l Marine water	Crustaceans - Elminius modestus	48 hours
	Acute LC50 4000 µg/l Fresh water	Fish - Jordanella floridae - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 0.01 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Chronic NOEC 0.4 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 500 µg/l Fresh water	Fish - Pimephales promelas - Larvae	32 days
Isobutylene Polymer	Acute LC50 >5600000 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
1,2,4-Trimethylbenzene	Acute LC50 4910 μg/l Marine water	Crustaceans - Elasmopus pectenicrus - Adult	48 hours
	Acute LC50 7720 μg/l Fresh water	Fish - Pimephales promelas	96 hours
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 11/19/2018 Version : 3 10/14

TS381101 Top Shield Elastomeric Sealant

White

Section 12. Ecological information

•	1,3,5-Trimethylbenzene	Acute LC50 13000 µg/l Marine water	Crustaceans - Cancer magister -	48 hours
			Zoea	
		Acute LC50 12520 µg/l Fresh water	Fish - Carassius auratus	96 hours
		Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Light Aromatic Hydrocarbons	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Tetrachloroethylene	-	49	low
Isobutylene Polymer	-	314 to 1882	high
1,2,4-Trimethylbenzene	-	243	low
Light Aromatic Hydrocarbons	-	10 to 2500	high
1,3,5-Trimethylbenzene	-	161	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1897	UN1897	UN1897	UN1897	UN1897
UN proper shipping name	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture. Marine pollutant (Tetrachloroethylene)
Transport hazard class(es)	6.1	6.1	6.1	6.1	6.1
Packing group	III	III	III	III	III

Date of issue/Date of revision

: 5/24/2019

Date of previous issue

:3 11/14

TS381101

Top Shield Elastomeric Sealant White

Section 14. Transport information

Environmental hazards	No.	No.		Yes. The environmentally hazardous substance mark is not required.	Yes.
Additional information	- ERG No. 160	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 26-2.36 (Class 6). ERG No. 160		The environmentally hazardous substance mark may appear if required by other transportation regulations.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-A, S-A

Special precautions for user :

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code

: Not available.

Proper shipping name Not available. Ship type Not available. **Pollution category** : Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

International lists

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Thailand inventory: Not determined. Turkey inventory: Not determined. Vietnam inventory: Not determined.

Date of issue/Date of revision 12/14 : 5/24/2019 Date of previous issue : 11/19/2018 Version: 3 TS381101 Top Shield Elastomeric Sealant SHW-85-NA-GHS-US

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B CARCINOGENICITY - Category 1B	Calculation method Calculation method Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPEČIFÍC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

History

Date of printing : 5/24/2019

Date of issue/Date of : 5/24/2019

revision

Date of previous issue : 11/19/2018

Version : 3

White

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs

Date of issue/Date of revision: 5/24/2019Date of previous issue: 11/19/2018Version: 313/14TS381101Top Shield Elastomeric SealantSHW-85-NA-GHS-US

Section 16. Other information

obtained from any other source.

Date of issue/Date of revision: 5/24/2019Date of previous issue: 11/19/2018Version: 314/14TS381101Top Shield Elastomeric Sealant WhiteSHW-85-NA-GHS-US