SAFETY DATA SHEET

TS382103

Section 1. Identification

Product name : Top Shield Hybrid Bonding Sealant

Hybrid

Product code : TS382103

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.

7440 State Highway 121 McKinney, TX 75070-2196

Emergency telephone number of the company

: (216) 566-2917

Product Information Telephone Number

: 855-569-1550

Regulatory Information Telephone Number

: (216) 566-2902

Transportation Emergency

: (800) 424-9300

Telephone Number

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 2A

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity:

1.3%

GHS label elements

Hazard pictograms





Signal word : Danger

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 1/14

TS382103 Top Shield Hybrid Bonding Sealant

Hybrid

Section 2. Hazards identification

Hazard statements

: Causes skin irritation.

May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.

May cause cancer.

May damage fertility or the unborn child.

Precautionary statements

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, protective clothing and eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

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

Storage Disposal

: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

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

Supplemental label elements

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure.

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
Calcium Carbonate	≥50 - ≤75	1317-65-3
Polypropylene Glycol	≥10 - ≤25	25322-69-4
Aminoethylaminopropyltrimethoxysilane	<3	1760-24-3
Carbon Black	≤1	1333-86-4
Dibutylbis(pentadionate)tin	<1	22673-19-4
Light Stabilizer	≤0.3	52829-07-9
Crystalline Silica, respirable powder	≤0.3	14808-60-7

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 and hence require reporting in this section.

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 2/14
TS382103 Top Shield Hybrid Bonding Sealant
Hybrid SHW-85-NA-GHS-US

Section 3. Composition/information on ingredients

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.

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: Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean

shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. 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. 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 contactInhalationCauses serious eye irritation.May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

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

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 3/14

TS382103 Top Shield Hybrid Bonding Sealant SHW-85-NA-GHS-US

Hybrid

Section 4. First aid measures

Ingestion

: Adverse symptoms may include the following: reduced fetal weight

increase in fetal deaths skeletal malformations

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.

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

: None known.

media

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 nitrogen oxides metal oxide/oxides

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).

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version: 12.02 4/14

TS382103 Top Shield Hybrid Bonding Sealant Hvbrid

Section 6. Accidental release measures

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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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	CAS#	Exposure limits
Calcium Carbonate	1317-65-3	OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2020). [calcium carbonate] TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total
Polypropylene Glycol	25322-69-4	OARS WEEL (United States, 4/2022).

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version: 12.02

TS382103 Top Shield Hybrid Bonding Sealant Hvbrid

5/14

Section 8. Exposure controls/personal protection

•	•	
		TWA: 10 mg/m³ 8 hours.
Aminoethylaminopropyltrimethoxysilane	1760-24-3	None.
Carbon Black	1333-86-4	ACGIH TLV (United States, 1/2022).
		TWA: 3 mg/m³ 8 hours. Form: Inhalable
		fraction
		NIOSH REL (United States, 10/2020).
		TWA: 3.5 mg/m³ 10 hours.
		TWA: 0.1 mg of PAHs/cm³ 10 hours.
		OSHA PEL (United States, 5/2018).
		TWA: 3.5 mg/m³ 8 hours.
Dibutylbis(pentadionate)tin	22673-19-4	ACGIH TLV (United States, 1/2022). [Tin,
		organic compounds as Sn] Absorbed
		through skin.
		TWA: 0.1 mg/m³, (as Sn) 8 hours.
		STEL: 0.2 mg/m³, (as Sn) 15 minutes.
		NIOSH REL (United States, 10/2020). [tin
		organic compounds as Sn] Absorbed
		through skin.
		TWA: 0.1 mg/m³, (as Sn) 10 hours.
		OSHA PEL (United States, 5/2018). [Tin,
		organic compounds (as Sn)]
		TWA: 0.1 mg/m³, (as Sn) 8 hours.
Light Stabilizer	52829-07-9	None.
Crystalline Silica, respirable powder	14808-60-7	OSHA PEL Z3 (United States, 6/2016).
		TWA: 250 mppcf / (%SiO2+5) 8 hours. Form:
		Respirable
		TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form:
		Respirable
		OSHA PEL (United States, 5/2018). [Silica,
		crystalline]
		TWA: 50 μg/m³ 8 hours. Form: Respirable
		dust
		ACGIH TLV (United States, 1/2022). [Silica,
		crystalline]
		TWA: 0.025 mg/m ³ 8 hours. Form:
		Respirable fraction
		NIOSH REL (United States, 10/2020).
		[SILICA, CRYSTALLINE (AS RESPIRABLE
		DUST)]
		TWA: 0.05 mg/m³ 10 hours. Form: respirable
		dust

Occupational exposure limits (Canada)

Ingredient name	CAS#	Exposure limits		
Carbon black	1333-86-4	CA British Columbia Provincial (Canada, 6/2022). TWA: 3 mg/m³ 8 hours. Form: Inhalable CA Ontario Provincial (Canada, 6/2019). TWA: 3 mg/m³ 8 hours. Form: Inhalable particulate matter. CA Quebec Provincial (Canada, 6/2022). TWAEV: 3 mg/m³ 8 hours. Form: inhalable dust CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 3.5 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada,		

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022

TS382103 Top Shield Hybrid Bonding Sealant Hybrid

SHW-85-NA-GHS-US

6/14

Version: 12.02

Section 8. Exposure controls/personal protection

1		1=10010
		7/2013).
		STEL: 7 mg/m³ 15 minutes.
		TWA: 3.5 mg/m³ 8 hours.
Dibutylbis(pentadionate)tin	22673-19-4	CA Alberta Provincial (Canada, 6/2018).
		[Tin Organic compounds as Sn] Absorbed
		through skin.
		15 min OEL: 0.2 mg/m³, (as Sn) 15 minutes.
		8 hrs OEL: 0.1 mg/m³, (as Sn) 8 hours.
		CA British Columbia Provincial (Canada,
		6/2022). [Tin - Organic compounds as Sn]
		Absorbed through skin.
		TWA: 0.1 mg/m³, (as Sn) 8 hours.
		STEL: 0.2 mg/m³, (as Sn) 15 minutes.
		CA Quebec Provincial (Canada, 6/2022).
		[Tin Organic compounds] Absorbed
		through skin.
		TWAEV: 0.1 mg/m³, (as Sn) 8 hours.
		STEV: 0.2 mg/m³, (as Sn) 15 minutes.
		CA Ontario Provincial (Canada, 6/2019).
		[Tin (Organic compounds) as Sn]
		Absorbed through skin.
		TWA: 0.1 mg/m³, (as Sn) 8 hours.
		CA Saskatchewan Provincial (Canada,
		7/2013). [Tin organic compounds as Sn]
		Absorbed through skin.
		STEL: 0.2 mg/m³, (measured as Sn) 15
		minutes.
		TWA: 0.1 mg/m³, (measured as Sn) 8 hours.
Quartz	14808-60-7	CA British Columbia Provincial (Canada,
		6/2022). [Silica, Crystalline - alpha quartz
		and Cristobalite Respirable]
		TWA: 0.025 mg/m³ 8 hours. Form:
		Respirable
		CA Quebec Provincial (Canada, 6/2022).
		[Silica Crystalline -Quartz]
		TWAEV: 0.1 mg/m³ 8 hours. Form:
		Respirable dust.
		CA Alberta Provincial (Canada, 6/2018).
		8 hrs OEL: 0.025 mg/m³ 8 hours. Form:
		Respirable particulate
		CA Ontario Provincial (Canada, 6/2019).
		[Silica, Crystalline (Quartz/Tripoli)]
		TWA: 0.1 mg/m³ 8 hours. Form: Respirable
		particulate matter.
		CA Saskatchewan Provincial (Canada,
		7/2013).
		TWA: 0.05 mg/m³ 8 hours. Form: respirable
		fraction
	-	

Occupational exposure limits (Mexico)

Hybrid

	CAS#	Exposure limits
Dibutylbis(pentadionate)tin	22673-19-4	NOM-010-STPS-2014 (Mexico, 4/2016). [Tin, organic compounds] Absorbed through skin. TWA: 0.1 mg/m³, (as Sn) 8 hours. STEL: 0.2 mg/m³, (as Sn) 15 minutes.

Date of issue/Date of revision: 6/15/2023Date of previous issue: 12/12/2022Version: 12.027/14TS382103Top Shield Hybrid Bonding SealantSHW-85-NA-GHS-US

Section 8. Exposure controls/personal protection

Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : 8

Melting point/freezing point : Not available. **Boiling point, initial boiling** : Not available.

point, and boiling range

Flash point : Closed cup: Not applicable.

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 8/14

TS382103 Top Shield Hybrid Bonding Sealant

Hybrid

Section 9. Physical and chemical properties

Evaporation rate : Not available.Flammability : Not available.Lower and upper explosion : Not available.

limit/flammability limit

Vapor pressure: Not available.Relative vapor density: Not available.

Relative density : 1.58

Solubility(ies) :

Media	Result
cold water	Not soluble

Partition coefficient: n-

octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)

: Not applicable.

Molecular weight : Not applicable.

Aerosol product

Heat of combustion : 8.332 kJ/g

Section 10. Stability and reactivity

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

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
Aminoethylaminopropyltrimethoxysilane	LD50 Oral	Rat	2413 mg/kg	-
Carbon Black	LD50 Oral	Rat	>15400 mg/kg	-
Light Stabilizer	LC50 Inhalation Vapor	Rat	500 mg/m ³	4 hours

Irritation/Corrosion

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 9/14

TS382103 Top Shield Hybrid Bonding Sealant

Hybrid

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Polypropylene Glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
Aminoethylaminopropyltrimethoxysilane	Eyes - Severe irritant	Rabbit	-	15 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Carbon Black Crystalline Silica, respirable powder	-	2B 1	Known to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	3 3 3	Route of exposure	Target organs
Calcium Carbonate	Category 3	-	Respiratory tract irritation
Dibutylbis(pentadionate)tin	Category 1	-	-

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Dibutylbis(pentadionate)tin	Category 1	-	immune system -
Crystalline Silica, respirable powder	Category 1	inhalation	

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contactInhalationMay cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 10/14

TS382103 Top Shield Hybrid Bonding Sealant

Hybrid

Section 11. Toxicological information

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

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

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

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: May damage the unborn child.

Developmental effects: No known significant effects or critical hazards.

Fertility effects : May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	185630.25 mg/kg
Inhalation (vapors)	846.22 mg/l

Date of issue/Date of revision : 6/15/2023 Date of previous issue : 12/12/2022 Version : 12.02 11/14

SHW-85-NA-GHS-US

TS382103 Top Shield Hybrid Bonding Sealant

Hybrid

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Polypropylene Glycol	Acute LC50 650 ppm Marine water	Fish - Menidia beryllina	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})

: 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	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Date of issue/Date of revision

: 6/15/2023

Date of previous issue

: 12/12/2022

Version : 12.02

12/14

TS382103 Top Shield Hybrid Bonding Sealant Hybrid

Section 14. Transport information

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 : Not available.

to IMO instruments

Proper shipping name : 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 (AIIC): Not determined. China inventory (IECSC): Not determined. Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): 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.

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

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Section 16. Other information

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method

History

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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)

N/A = Not available SGG = Segregation Group 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 is responsible to determine the conditions necessary for the safe use of this product. 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 obtained from any other source.

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