SAFETY DATA SHEET



Date of issue/Date of revision19 June 2021Version 21

Section 1. Identification	
Product name	: PR 1770 B 1/2 Part A
Product code	: PR 1770 B 1/2 Part A
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Product use	: Industrial applications.
Use of the substance/ mixture	: Sealants
Uses advised against	: Not applicable.
Manufacturer	: PPG Aerospace PRC-DeSoto 12780 San Fernando Road Sylmar, CA 91342
Emergency telephone number	Phone: 818 362 6711 : (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)

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	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 6.3% (oral), 94.9% (dermal), 48.3% (inhalation)
GHS label elements	
Hazard pictograms	
Signal word	: Warning

Product name PR 1770 B 1/2 Part A

Section 2. Hazards identification

Hazard statements	Harmful if swallowed or if inhaled. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. (brain)	
Precautionary statements		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions h been read and understood. Wear protective gloves, protective clothing and eye or protection. Use only outdoors or in a well-ventilated area. Do not breathe vapor. not eat, drink or smoke when using this product. Wash thoroughly after handling.	face
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 of doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if y feel unwell. Rinse mouth.	or
Storage	Store locked up.	
Disposal	Dispose of contents and container in accordance with all local, regional, national a international regulations.	nd
Supplemental label elements	Sanding and grinding dusts may be harmful if inhaled. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.	
Hazards not otherwise classified	Oxidising potential : Contact with combustible material may cause fire. Keep awa from clothing, incompatible materials and combustible materials. This material increases the risk of fire and may aid combustion. Prolonged or repeated contact dry skin and cause irritation.	

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Product name	:	PR 1770 B 1/2 Part A

Ingredient name	%	CAS number
manganese dioxide	≥20 - ≤50	1313-13-9
Terphenyl, hydrogenated	≥20 - ≤50	61788-32-7
Zeolites	≥5.0 - ≤10	1318-02-1
Polyphenyls, quater- and higher, partially hydrogenated	≥5.0 - ≤10	68956-74-1
Talc, not containing asbestiform fibers	≥1.0 - ≤5.0	14807-96-6
carbon black	≥1.0 - ≤5.0	1333-86-4
terphenyl	≥1.0 - ≤5.0	26140-60-3
magnesium carbonate	≥1.0 - ≤5.0	546-93-0
1,3-diphenylguanidine	≥1.0 - ≤4.6	102-06-7

SUB codes represent substances without registered CAS Numbers.

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 or the environment and hence require reporting in this section.

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

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person. Description of necessary first aid measures

Eye contact	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids
Inhalation	apart for at least 10 minutes and seek immediate medical advice. Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is
	irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effect	ts
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Harmful if inhaled.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Harmful if swallowed.
Over-exposure signs/symp	<u>toms</u>
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following:
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation
	dryness
	cracking
	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
	skeletal mailonnations
Indication of immediate med	lical 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.

See toxicological information (Section 11)

United States Page: 3/14

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 oxides nitrogen oxides sulfur 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 non- emergency 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 co	ntainment 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.
	United States Page: 4/14

Product name PR 1770 B 1/2 Part A

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. 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 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.
Special precautions	: Keep away from combustible materials. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
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.
Conditions for safe storage, including any incompatibilities	: Do not store below the following temperature: 5°C (41°F). 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
manganese dioxide	ACGIH TLV (United States, 3/2020).
	TWA: 0.1 mg/m ³ , (as Mn) 8 hours. Form:
	Inhalable fraction
	TWA: 0.02 mg/m ³ , (as Mn) 8 hours. Form:
	Respirable fraction
	OSHA PEL (United States, 5/2018).
	CEIL: 5 mg/m³, (as Mn)
Terphenyl, hydrogenated	ACGIH TLV (United States, 3/2020).
	TWA: 4.9 mg/m³ 8 hours.
	TWA: 0.5 ppm 8 hours.
Zeolites	ACGIH TLV (United States, 3/2020).
	TWA: 1 mg/m ³ 8 hours. Form: Respirable
	fraction
Polyphenyls, quater- and higher, partially hydrogenated	None.
Talc, not containing asbestiform fibers	ACGIH TLV (United States, 3/2020).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	OSHA PEL Z3 (United States).
	TWA: 2 mg/m ³
carbon black	ACGIH TLV (United States, 3/2020).
<u>.</u>	United States Page: 5/14

Version 21

Product name PR 1770 B 1/2 Part A

Section 8. Exposure controls/personal protection

Key to abbreviations		
1,3-diphenylguanidine	None.	
	TWA: 15 mg/m ³ 8 hours. Form: Total dust	
	TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction	
magnesium carbonate	OSHA PEL (United States, 5/2018).	
	CEIL: 9 mg/m ³	
	OSHA PEL (United States, 5/2018).	
	C: 0.53 ppm	
	C: 5 mg/m ³	
terphenyl	ACGIH TLV (United States, 3/2020).	
	TWA: 3.5 mg/m ³ 8 hours.	
	OSHA PEL (United States, 5/2018).	
	fraction	
	TWA: 3 mg/m ³ 8 hours. Form: Inhalable	

А	= Acceptable Maximum Peak	S	 Potential skin absorption
ACGIH	 American Conference of Governmental Industrial Hygienists. 	SR	 Respiratory sensitization
С	= Ceiling Limit	SS	 Skin sensitization
F	= Fume	STEL	 Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	 Occupational Safety and Health Administration. 	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	-	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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 measur	<u>es</u>	
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.
Eye/face protection	1	Safety glasses with side shields.
Skin protection		

Product name PR 1770 B 1/2 Part A

Section 8. Exposure controls/personal 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.
Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: nitrile rubber, natural rubber (latex)
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	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

AppearancePhysical state:Liquid.Color:Black.Odor threshold:Not available.Odor threshold:Not available.pH:Not available.Beiling point:Not available.Boiling point::Vator (680°F):Flash point::It is a vailable.:Decomposition temperature:Vator and upper explosive:It is analysis:Evaporation rate:Vapor pressure:Vapor density:Relative density:Solubility:Not spailable.It is poility:It is po			• •
Color:Black.Odor:Not available.Odor threshold:Not available.pH:Not applicable.Melting point:360°C (680°F)Flash point:Closed cup: Not applicable.Auto-ignition temperature:Not available.Decomposition temperature:Not available.Flammability (solid, gas):Not available.Evaporation rate:Not available.Evaporation rate:Not available.Vapor density:Not available.Vapor density:Not available.Relative density:1.76Density (Ibs / gal):14.69	Appearance		
Odor: Not available.Odor threshold: Not available.pH: Not applicable.Melting point: Not available.Boiling point: 360°C (680°F)Flash point: Closed cup: Not applicable.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Flammability (solid, gas): Not available.Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Physical state	:	Liquid.
Odor threshold pH:Not available.PH:Not applicable.Melting point::Boiling point::Boiling point::Flash point::Auto-ignition temperature::Decomposition temperature:Not available.Flammability (solid, gas):Not available.Flammability (solid, gas):Not available.Evaporation rate:Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:1.76Density (lbs / gal):14.69	Color	1	Black.
pH:Not applicable.Melting point:Not available.Boiling point:360°C (680°F)Flash point:Closed cup: Not applicable.Auto-ignition temperature:Not available.Decomposition temperature:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Not available.Evaporation rate:Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:1.76Density (lbs / gal):14.69	Odor	1	Not available.
Melting point:Not available.Boiling point:360°C (680°F)Flash point:Closed cup: Not applicable.Auto-ignition temperature:Not available.Decomposition temperature:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Not available.Evaporation rate:Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:1.76Density (lbs / gal):14.69	Odor threshold	:	Not available.
Boiling point: $360^{\circ}C (680^{\circ}F)$ Flash point:Closed cup: Not applicable.Auto-ignition temperature:Not available.Decomposition temperature:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Not available.Evaporation rate:Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:1.76Density (lbs / gal):14.69	рН	4	Not applicable.
Flash point: Closed cup: Not applicable.Auto-ignition temperature: Not available.Decomposition temperature: Not available.Flammability (solid, gas): Not available.Lower and upper explosive (flammable) limits: Not available.Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Melting point	4	Not available.
Auto-ignition temperature:Not available.Decomposition temperature:Not available.Flammability (solid, gas):Not available.Lower and upper explosive (flammable) limits:Not available.Evaporation rate:Not available.Vapor pressure:Not available.Vapor density:Not available.Relative density:1.76Density (lbs / gal):14.69	Boiling point	4	360°C (680°F)
Decomposition temperature: Not available.Flammability (solid, gas): Not available.Lower and upper explosive (flammable) limits: Not available.Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Flash point	4	Closed cup: Not applicable.
Flammability (solid, gas): Not available.Lower and upper explosive (flammable) limits: Not available.Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Auto-ignition temperature	1	Not available.
Lower and upper explosive (flammable) limits: Not available.Evaporation rate Vapor pressure: Not available.Vapor density Relative density: Not available.Relative density Density (lbs / gal): 14.69	Decomposition temperature	:	Not available.
(flammable) limitsEvaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Flammability (solid, gas)	:	Not available.
Vapor pressure: Not available.Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69		:	Not available.
Vapor density: Not available.Relative density: 1.76Density (lbs / gal): 14.69	Evaporation rate	:	Not available.
Relative density: 1.76Density (lbs / gal): 14.69	Vapor pressure	:	Not available.
Density (lbs / gal) : 14.69	Vapor density	:	Not available.
	Relative density	:	1.76
Solubility : Insoluble in the following materials: cold water.	Density(lbs / gal)	:	14.69
	Solubility	:	Insoluble in the following materials: cold water.

Version 21

Product name PR 1770 B 1/2 Part A

Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	: Not applicable.
Viscosity	: K inematic (40°C (104°F)): >21 mm²/s (>21 cSt)
VOC	: 0
% Solid. (w/w)	: 100

Section 10. Stability and reactivity					
: No specific test data related to reactivity available for this product or its ingredients.					
: The product is stable.					
: Under normal conditions of storage and use, hazardous reactions will not occur.					
: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.					
: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.					
: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides					

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
manganese dioxide	LD50 Oral	Rat	3478 mg/kg	-	
Terphenyl, hydrogenated	LD50 Oral	Rat	17500 mg/kg	-	
Zeolites	LD50 Oral	Rat	>5 g/kg	-	
carbon black	LD50 Oral	Rat	>10 g/kg	-	
terphenyl	LD50 Oral	Rat - Female	2304 mg/kg	-	
magnesium carbonate	LD50 Oral	Rat	8000 mg/kg	-	
1,3-diphenylguanidine	LD50 Oral	Rat	323 mg/kg	-	
Conclusion/Summary : There are no data available on the mixture itself. Irritation/Corrosion					
<u>Sensitization</u> <u>Conclusion/Summary</u> Skin	: There are no data available on	the mixture itself.			

Product name PR 1770 B 1/2 Part A

Section 11. Toxicological information

Respiratory	: There are no data available on the mixture itself.			ailable on the mixture itself.	
Mutagenicity					
Conclusion/Summary		: There are no data available on the mixture itself.			
Carcinogenicity					
Conclusion/Summary : There are no data availa			ailable on the mixture itself.		
Classification					
Product/ingredient name		OSHA	IARC	NTP	

carbo	n bl	ack		-	2B
	_				

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

3

Teratogenicity

Zeolites

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
✓alc, not containing asbestiform fibers	Category 3	-	Respiratory tract irritation
1,3-diphenylguanidine	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
manganese dioxide	Category 2	inhalation	brain

Target organs

: Contains material which causes damage to the following organs: lungs, skin, central nervous system (CNS).

Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, spleen, lymphatic system, cardiovascular system, upper respiratory tract, bone marrow, eye, lens or cornea.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.	
Inhalation	Harmful if inhaled.	
Skin contact	Defatting to the skin. May cause skin dryness and irritation.	

Version 21

Product name PR 1770 B 1/2 Part A

Section 11. Toxicological information

Ingestion	: Harmful if swallowed.
Over-exposure signs/sympt	
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following:
	reduced fetal weight
	increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following:
	irritation
	dryness
	cracking
	reduced fetal weight
	increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following:
ingestion	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Delayed and immediate effect	s and also chronic effects from short and long term exposure
Conclusion/Summary	: There are no data available on the mixture itself. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral,
	inhalation and dermal routes of exposure and eye contact.
Short term exposure	
Potential immediate	: There are no data available on the mixture itself.
effects	
Potential delayed effects	: There are no data available on the mixture itself.
Long term exposure	
Potential immediate	: There are no data available on the mixture itself.
effects	
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health effe	<u>cts</u>
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or
	repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Numerical measures of toxici	<u>tv</u>
Acute toxicity estimates	

Section 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
PR 1770 B 1/2 Part A	1016.8	N/A	N/A	N/A	1.7
manganese dioxide	500	N/A	N/A	N/A	1.5
Terphenyl, hydrogenated	17500	N/A	N/A	N/A	N/A
terphenyl	2304	N/A	N/A	N/A	N/A
magnesium carbonate	8000	N/A	N/A	N/A	N/A
1,3-diphenylguanidine	323	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Zeolites terphenyl	Acute LC50 >680 mg/l Acute EC50 0.022 mg/l Chronic NOEC 0.00322 mg/l	Fish Daphnia Daphnia	96 hours 48 hours 72 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
terphenyl	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
7,3-diphenylguanidine	2.42	19.95	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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

United States Page: 11/14

Product name PR 1770 B 1/2 Part A

Section 13. Disposal considerations

and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

=			
	DOT	IMDG	ΙΑΤΑ
UN number	Not regulated.	UN3082	UN3082
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
		(Terphenyl, hydrogenated, terphenyl)	(Terphenyl, hydrogenated, terphenyl)
Transport hazard class (es)	-	9	9
Packing group	-	Ш	111
Environmental hazards	No.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(Terphenyl, hydrogenated, terphenyl)	Not applicable.

Additional information

DOT : No	one identified.
----------	-----------------

- **IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- ΙΑΤΑ
- : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- **Special precautions for user : Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

Product name PR 1770 B 1/2 Part A

Section 15. Regulatory information

SARA 311/312

Classification : ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 **CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2** SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HNOC - Defatting irritant HNOC - Avoid contact with organic materials.

Composition/information on ingredients

Name	%	Classification
manganese dioxide	≥20 - ≤50	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
		HNOC - Avoid contact with organic materials.
Polyphenyls, quater- and higher, partially hydrogenated	≥5.0 - ≤10	HNOC - Defatting irritant
Talc, not containing asbestiform fibers	≥1.0 - ≤5.0	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
carbon black	≥1.0 - ≤5.0	COMBUSTIBLE DUSTS CARCINOGENICITY - Category 2
1,3-diphenylguanidine	≥1.0 - ≤4.6	COMBUSTIBLE DUSTS ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

Chemical name

CAS number **Concentration** : manganese dioxide 1313-13-9 30 - 60

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

California Prop. 65

Supplier notification

WARNING: Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

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

Health : Flammability : 0 Physical hazards : 3 1 (*) - Chronic effects

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 MSDSs 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.

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.

National Fire Protection Association (U.S.A.)

United States Page: 13/14

Product name PR 1770 B 1/2 Part A

Section 16. Other information

Health : 3 Flamma	ability : 0 Instability : 1
Date of previous issue	: 4/2/2021
Organization that prepared the SDS	: EHS
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 = Internediate 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.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET



Date of issue/Date of revision10 June 2021Version 15

Section 1. Identification		
Product name	: PR 1770 B 1/2 Part B	
Product code	: PR 1770 B 1/2 Part B	
Other means of identification	: Not available.	
Product type	: Solid.	
Relevant identified uses o	of the substance or mixture and uses advised against	
Product use	: Industrial applications.	
Use of the substance/ mixture	: Sealants	
Uses advised against	: Not applicable.	
Manufacturer	: PPG Aerospace PRC-DeSoto 12780 San Fernando Road Sylmar, CA 91342	
Emergency telephone number	Phone: 818 362 6711 : (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)	

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	: ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 6.7% (oral), 10.5% (dermal), 94.8% (inhalation)
GHS label elements	
Hazard pictograms	
Signal word	: Warning

Product name PR 1770 B 1/2 Part B

Section 2. Hazards identification

Hazard statements	: Harmful in contact with skin. May cause an allergic skin reaction. Causes eye irritation. Suspected of causing cancer.
Precautionary statements	
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. Avoid breathing dust. 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. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. 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	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Sanding and grinding dusts may be harmful if inhaled. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Emits toxic fumes when heated.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Product name	: PR 1770 B 1/2 Part B

Ingredient name	%	CAS number
Ethanethiol, 2,2'-thiobis-, reaction products with reduced 1,1'-[methylenebis (oxy)]bis[2-chloroethane]-sodium sulfide (Na2 (Sx)-1,2,3-trichloropropane polymer	≥20 - <50	109159-22-0
calcium carbonate	≥20 - ≤50 ≥1.0 - ≤5.0 <1.0	471-34-1 13463-67-7 3570-55-6

SUB codes represent substances without registered CAS Numbers.

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 or the environment and hence require reporting in this section.

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

Product name PR 1770 B 1/2 Part B

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person. Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health	effects
Eye contact	: Causes eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Harmful in contact with skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/s	<u>ymptoms</u>
Eye contact	: Adverse symptoms may include the following: irritation watering redness
Inhalation	: No specific data.
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	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

 Specific treatments
 : No specific treatment.

 Protection of first-aiders
 : No action shall be taken involving any personal risk or without suitable training. 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	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	 Decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds metal oxide/oxides Formaldehyde.
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. Provide adequate ventilatio Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	n.	
For emergency responders	f specialized clothing is required to deal with the spillage, take note of any information Section 8 on suitable and unsuitable materials. See also the information in "For non emergency 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 environmenta pollution (sewers, waterways, soil or air).		
Methods and materials for containment and cleaning up			
Small spill	Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuun dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose <i>r</i> ia a licensed waste disposal contractor.		
Large spill	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do no dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a clos abeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	ot sed,	

Product name PR 1770 B 1/2 Part B

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. 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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.
Special precautions	: If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
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.
Conditions for safe storage, including any incompatibilities	: Do not store below the following temperature: 5°C (41°F). 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ethanethiol, 2,2'-thiobis-, reaction products with reduced 1,1'- [methylenebis(oxy)]bis[2-chloroethane]-sodium sulfide (Na2 (Sx) -1,2,3-trichloropropane polymer	None.
calcium carbonate	ACGIH TLV (United States). TWA: 3 mg/m ³ Form: Respirable TWA: 10 mg/m ³ Form: Total dust
titanium dioxide	OSHA PEL (United States). TWA: 5 mg/m ³ Form: Respirable TWA: 15 mg/m ³ OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2020).
2,2'-thiodiethanethiol	TWA: 10 mg/m³ 8 hours. None.
Key to abbreviations	
A = Acceptable Maximum Peak ACGIH = American Conference of Governmental Industrial Hygienists.	S= Potential skin absorptionSR= Respiratory sensitization

SS = Skin sensitization

	
с =	Ceiling Limit

United States Page: 5/13

Product name PR 1770 B 1/2 Part B

Section 8. Exposure controls/personal protection

F	=	F	un	٦e

= Internal Permissible Exposure Limit IPEL

OSHA = Occupational Safety and Health Administration.

R = Respirable Ζ

= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

Recommended monitoring : If this product contains ingredients with exposure limits, personal, workplace procedures atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required. Appropriate engineering : 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 controls airborne contaminants below any recommended or statutory limits. **Environmental exposure** Emissions from ventilation or work process equipment should be checked to ensure controls 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 : Wash hands, forearms and face thoroughly after handling chemical products, before **Hygiene measures** 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 Chemical splash goggles. 2 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. Gloves : butyl rubber Personal protective equipment for the body should be selected based on the task being **Body protection** 2 performed and the risks involved and should be approved by a specialist before handling this product. : Appropriate footwear and any additional skin protection measures should be selected Other skin protection based on the task being performed and the risks involved and should be approved by a specialist before handling this product. **Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate. certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.

STEL TD

- = Short term Exposure limit values = Total dust
- TLV = Threshold Limit Value
- TWA = Time Weighted Average

Version 15

Product name PR 1770 B 1/2 Part B

Section 9. Physical and chemical properties

Appearance

Physical state	: Solid.
Color	: Gray.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: 176.67°C (350°F)
Flash point	: Closed cup: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not applicable.
Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not applicable.
Relative density	: 1.56
Density(lbs / gal)	: 13.02
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	: Not applicable.
Viscosity	: Kinematic (40°C (104°F)): Not applicable.
voc	: 1 g/l
% Solid. (w/w)	: 99.9

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	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Version 15

Product name PR 1770 B 1/2 Part B

Section 10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds Formaldehyde. metal oxide/ oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result			Species	Dose	Exposure
Ethanethiol, 2,2'-thiobis-, reaction products with reduced 1,1'-[methylenebis (oxy)]bis[2-chloroethane]- sodium sulfide (Na2 (Sx) -1,2,3-trichloropropane polymer	LD50 Oral			Rat	>3000 mg/kg	-
calcium carbonate	LD50 Derm	nal		Rat	>2000 mg/kg	-
titanium dioxide	LD50 Oral LC50 Inhal LD50 Derm LD50 Oral		s and mists	Rat Rat Rabbit Rat	6450 mg/kg >6.82 mg/l >5000 mg/kg >5000 mg/kg	- 4 hours - -
2,2'-thiodiethanethiol	LD50 Oral			Rat	200 mg/kg	-
Conclusion/Summary	: There are	no data av	vailable on th	ne mixture itself.		
Irritation/Corrosion						
Conclusion/Summary						
Skin	: There are	no data av	vailable on th	ne mixture itself.		
Eyes	: There are	no data av	vailable on th	ne mixture itself.		
Respiratory	: There are	no data av	vailable on th	ne mixture itself.		
<u>Sensitization</u>						
<u>Conclusion/Summary</u> Skin	• There are	no data av	voilable on th	ne mixture itself.		
-				ne mixture itself.		
Respiratory <u>Mutagenicity</u>		no uala av				
Conclusion/Summary	• There are	no data av	vailable on th	ne mixture itself.		
Carcinogenicity						
Conclusion/Summary	• There are	no data av	vailable on th	ne mixture itself.		
<u>Classification</u>						
Product/ingredient name	OSHA	IARC	NTP			
titanium dioxide	-	2B	-			

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

Reproductive toxicity

United States Page: 8/

Product name PR 1770 B 1/2 Part B

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Target organs

: Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact	: Causes eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Harmful in contact with skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	ptoms
Eye contact	: Adverse symptoms may include the following:
	irritation
	watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following:
Okin contact	irritation
	redness
Ingestion	: No specific data.
•	ects and also chronic effects from short and long term exposure
Conclusion/Summary	 There are no data available on the mixture itself. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.
Short term exposure	

Section 11. Toxicological information

	-
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
<u>Long term exposure</u>	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health eff	ects
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	 Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
PR 1770 B 1/2 Part B Ethanethiol, 2,2'-thiobis-, reaction products with reduced 1,1'-[methylenebis(oxy)]bis[2-chloroethane]- sodium sulfide (Na2 (Sx)-1,2,3-trichloropropane polymer	5239.4 2500	1542.2 1100	N/A N/A	N/A N/A	N/A N/A
calcium carbonate 2,2'-thiodiethanethiol	6450 200	2500 N/A	N/A N/A	N/A N/A	N/A N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute EC10 >14 mg/l	Algae	72 hours
	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.12 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,2'-thiodiethanethiol	-	-	Not readily

Bioaccumulative potential

Not available.

Product name PR 1770 B 1/2 Part B

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

Disposal methods

Г

: 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information				
	DOT	IMDG	IATA	
UN number	Not regulated.	Not regulated.	Not regulated.	
UN proper shipping name	-	-	-	
Transport hazard class (es)	-	-	-	
Packing group	-	-	-	
Environmental hazards	No.	No.	No.	
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	

Additional information

- **DOT** : None identified.
- IMDG : None identified.

IATA : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Product name PR 1770 B 1/2 Part B

14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification

: ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

Composition/information on ingredients

Name	%	Classification
Ethanethiol, 2,2'-thiobis-, reaction products with reduced 1,1'-[methylenebis(oxy)]bis [2-chloroethane]-sodium sulfide (Na2 (Sx)-1,2,3-trichloropropane polymer	≥20 - <50	ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2B
titanium dioxide 2,2'-thiodiethanethiol	≥1.0 - ≤5.0 <1.0	CARCINOGENICITY - Category 2 ACUTE TOXICITY (oral) - Category 3 SKIN SENSITIZATION - Category 1A

California Prop. 65

MARNING: Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

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

Health : 2 * Flammability : 0 Physical hazards : 0

(*) - Chronic effects

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 MSDSs 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.

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.

National Fire Prot	ection Asso	ocia	tion	(U.S.	A .)		
Health : 2	Flamma	bilit	:y :	0	Instability	:	0
Date of previous issue :			4/6/2	2021			
Organization that prepared : EHS the SDS							

Product name PR 1770 B 1/2 Part B

Section 16. Other information

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
Indicatos informatio	n that has changed from providually issued version

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.