SAFETY DATA SHEET



Date of issue/Date of revision 11 June 2021

Version 13

Section 1. Identification

Product name : PR 1197 Part A
Product code : PR 1197 Part A
Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses 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 Phone: 818 362 6711

Emergency telephone

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada)

01-800-00-21-400 (Mexico)

Section 2. Hazards identification

OSHA/HCS status

Classification of the substance or mixture

- : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- : FLAMMABLE LIQUIDS Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

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

Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 69.5%

(oral), 69.5% (dermal), 71.6% (inhalation)

GHS label elements

Hazard pictograms





United States Page: 1/14

Date of issue 11 June 2021 Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

Section 2. Hazards identification

Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Precautionary statements

Prevention

: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation 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. Store in a well-ventilated place. Keep container tightly closed. Keep

COOL

Disposal

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

Supplemental label elements

: Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : PR 1197 Part A

Ingredient name	%	CAS number
Benzene, ethenylmethyl-, homopolymer	≥20 - ≤50	9017-21-4
butanone	≥20 - ≤28	78-93-3
heptan-2-one	≥1.0 - ≤6.9	110-43-0
nonanoic acid	≥0.10 - ≤2.7	112-05-0

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.

United States Page	e: 2/14
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Date of issue 11 June 2021 Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

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 serious eye irritation.

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

dizziness. May cause respiratory irritation.

Skin contact: Causes skin irritation. Defatting to the skin.

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

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion: No specific data.

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

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

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

Specific treatments: No specific treatment.

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.

United States Page: 3/14

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

g

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides

nitrogen 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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 containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.

United States Page: 4/14

Product code PR 1197 Part A
Product name PR 1197 Part A

Date of issue 11 June 2021

Version 13

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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

United States Page: 5/14

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Benzene, ethenylmethyl-, homopolymer	None.
butanone	ACGIH TLV (United States, 3/2020).
	STEL: 885 mg/m³ 15 minutes.
	STEL: 300 ppm 15 minutes.
	TWA: 590 mg/m³ 8 hours.
	TWA: 200 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 590 mg/m³ 8 hours.
	TWA: 200 ppm 8 hours.
heptan-2-one	ACGIH TLV (United States, 3/2020).
	TWA: 233 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 465 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
nonanoic acid	None.

Key to abbreviations

Α	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

Consult local authorities for acceptable exposure limits.

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

procedures

Z

Recommended monitoring: 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

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

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Chemical splash goggles.

United States Page: 6/14 Product code PR 1197 Part A
Product name PR 1197 Part A

Date of issue 11 June 2021

Version 13

Section 8. Exposure controls/personal protection

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

: For prolonged or repeated handling, use the following type of gloves:

Recommended: butyl rubber

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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

Appearance

Physical state : Liquid.
Color : Tan.

Odor : Not available.
Odor threshold : Not available.
pH : Not applicable.
Melting point : Not available.

Boiling point : 79.44 to 233.33°C (175 to 452°F) **Flash point** : Closed cup: 21.11°C (70°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.01

United States

Page: 7/14

Product name PR 1197 Part A

Section 9. Physical and chemical properties

Density (lbs/gal)

Solubility Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt) **Viscosity**

VOC : 93 g/l

Section 10. Stability and reactivity

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

Chemical stability : The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid : 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.

Hazardous decomposition products

Depending on conditions, decomposition products may include the following materials:

carbon oxides nitrogen oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
heptan-2-one	LC50 Inhalation Vapor	Rat	16.7 mg/l	4 hours
•	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
nonanoic acid	LD50 Dermal	Rabbit	5000 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself. : There are no data available on the mixture itself. **Eves** : There are no data available on the mixture itself. Respiratory

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

United States Page: 8/14

Product name PR 1197 Part A

Section 11. Toxicological information

Respiratory: There are no data available on the mixture itself.

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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)

Name	Category	Route of exposure	Target organs
Benzene, ethenylmethyl-, homopolymer	Category 3		Respiratory tract irritation
butanone heptan-2-one	Category 3 Category 3		Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: brain.

Contains material which may cause damage to the following organs: kidneys, the nervous system, peripheral nervous system, upper respiratory tract, skin, central

nervous system (CNS), eye, lens or cornea.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

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

dizziness. May cause respiratory irritation.

Skin contact: Causes skin irritation. Defatting to the skin.

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

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

United States Page: 9/14

Date of issue 11 June 2021 Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

Section 11. Toxicological information

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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

Conclusion/Summary : There are no data

There are no data available on the mixture itself. 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. 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 effects

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

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)	(vapors)	Inhalation (dusts and mists) (mg/ I)
PR 1197 Part A	2555	70979.6	N/A	87	7.8
butanone	2737	6480	N/A	N/A	N/A
heptan-2-one	1600	10206	N/A	16.7	1.5
nonanoic acid	5000	5000	N/A	N/A	N/A

United States Page: 10/14

Date of issue 11 June 2021

Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
heptan-2-one	Acute LC50 131 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
heptan-2-one	OECD 310	69 % - Readily - 28 days -		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodegi	radability
heptan-2-one	-		-		Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
tanone	0.3	-	low
heptan-2-one	2.26	-	low
nonanoic acid	3.4	-	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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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

United States Page: 11/14

Date of issue 11 June 2021 Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

14. Transport information

	DOT	IMDG	IATA
UN number	UN1866	UN1866	UN1866
UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
Transport hazard class (es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	22528.5	Not applicable.	Not applicable.
RQ substances	(butanone)	Not applicable.	Not applicable.

Additional information

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

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.

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 : FLAMMABLE LIQUIDS - Category 2

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

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

Category 3

HNOC - Defatting irritant

United States Page: 12/14

Date of issue 11 June 2021 Version 13

Product code PR 1197 Part A
Product name PR 1197 Part A

Section 15. Regulatory information

Composition/information on ingredients

Name	%	Classification
Benzene, ethenylmethyl-, homopolymer	≥20 - ≤50	COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORĞAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
butanone	≥20 - ≤28	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
heptan-2-one	≥1.0 - ≤6.9	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
nonanoic acid	≥0.10 - ≤2.7	HNOC - Defatting irritant SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

Section 16. Other information

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

Health: 2 Flammability: 3 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 Protection Association (U.S.A.)

Health: 2 Flammability: 3 Instability: 0

Date of previous issue : 4/6/2021

Organization that prepared : EHS

the SDS

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

United States Page: 13/14

Product code PR 1197 Part A
Product name PR 1197 Part A

Date of issue 11 June 2021

Version 13

Section 16. Other information

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.

United States Page: 14/14

SAFETY DATA SHEET



Date of issue/Date of revision 10 June 2021

Version 15

Section 1. Identification

Product name : PR 1197 Part B
Product code : PR 1197 Part B
Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses 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 Phone: 818 362 6711

Emergency telephone

number

: (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

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 2 RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 88.9% (oral), 88.9% (dermal), 88.9% (inhalation)

GHS label elements

Hazard pictograms







Signal word : Danger

United States Page: 1/15

Date of issue 10 June 2021

Version 15

Product code PR 1197 Part B
Product name PR 1197 Part B

Section 2. Hazards identification

Hazard statements

: Flammable liquid and vapor.

May cause an allergic skin reaction.

Fatal if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause 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. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. 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. Immediately call a POISON CENTER or doctor. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

Storage Disposal

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

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

Supplemental label elements

: Moisture-sensitive material. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Skin contact to isocyanate monomer may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : PR 1197 Part B

Ingredient name	%	CAS number
4-methyl-m-phenylene diisocyanate	≥5.0 - ≤7.3 ≥0.10 - ≤2.6 ≥0.10 - ≤2.9	78-93-3 584-84-9 110-43-0

United States	Page: 2/15
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Product name PR 1197 Part B

Section 3. Composition/information on ingredients

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

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: No known significant effects or critical hazards.

Inhalation : Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

Skin contact: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin

reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.

Inhalation : Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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

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

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

Specific treatments: No specific treatment.

United States Page: 3/15

Product code PR 1197 Part B

Date of issue 10 June 2021

Version 15

Product name PR 1197 Part B

Section 4. First aid measures

Protection of first-aiders

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides

Cyanate and isocyanate. hydrogen cyanide

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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 containment and cleaning up

United States Page: 4/15

Product code PR 1197 Part B
Product name PR 1197 Part B

Date of issue 10 June 2021

Version 15

Section 6. Accidental release measures

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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.

Special provisions

: 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). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

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 or asthma, allergies or chronic or recurrent respiratory disease 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 breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

United States Page: 5/15

Product code PR 1197 Part B Product name PR 1197 Part B

Date of issue 10 June 2021

Version 15

Section 7. Handling and storage

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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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. Precautions should be taken to minimize exposure to atmospheric humidity or water.

CO₂ will be formed, which, in closed containers, could result in pressurization.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
butanone	ACGIH TLV (United States, 3/2020).
	STEL: 885 mg/m³ 15 minutes.
	STEL: 300 ppm 15 minutes.
	TWA: 590 mg/m³ 8 hours.
	TWA: 200 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 590 mg/m³ 8 hours.
	TWA: 200 ppm 8 hours.
4-methyl-m-phenylene diisocyanate	ACGIH TLV (United States, 3/2020).
	Absorbed through skin. Skin sensitizer.
	Inhalation sensitizer.
	STEL: 0.005 ppm 15 minutes. Form:
	Inhalable fraction and vapor
	TWA: 0.001 ppm 8 hours. Form: Inhalable
	fraction and vapor
	OSHA PEL (United States, 5/2018).
	CEIL: 0.14 mg/m³
	CEIL: 0.02 ppm
heptan-2-one	ACGIH TLV (United States, 3/2020).
	TWA: 233 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 465 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.

Key to abbreviations

= Acceptable Maximum Peak ACGIH = American Conference of Governmental Industrial Hygienists.

С = Ceiling Limit

F = Fume **IPEL** = Internal Permissible Exposure Limit

= Occupational Safety and Health Administration. **OSHA**

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

S = Potential skin absorption SR = Respiratory sensitization

SS = Skin sensitization

STFL = Short term Exposure limit values

TD = Total dust

TLV = Threshold Limit Value TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

United States Page: 6/15

Product code PR 1197 Part B Product name PR 1197 Part B Date of issue 10 June 2021

Version 15

Section 8. Exposure controls/personal protection

procedures

Recommended monitoring: 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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 **Skin protection Hand protection**

Safety glasses with side shields.

: 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 Body protection : butvl rubber

: 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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

Use an air-fed respirator unless a site-specific assessment determines that an air-fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. 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.

The respiratory protection shall be in accordance to 29 CFR 1910.134.

United States Page: 7/15

Product name PR 1197 Part B

Section 8. Exposure controls/personal protection

Restrictions on use : Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.
Color : Clear.

Odor : Not available.
Odor threshold : Not available.
pH : Not applicable.
Melting point : Not available.

Boiling point : 79.44 to 251.11°C (175 to 484°F) **Flash point** : Closed cup: 36.11°C (97°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.

Relative density : 1.04

Density (lbs / gal) : 8.68

Solubility : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

Viscosity : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

VOC : 323 g/l

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 : In a fire, hazardous decomposition products may be produced.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water.

Uncontrolled exothermic reactions occur with amines and alcohols.

United States Page: 8/15

Product name PR 1197 Part B

Section 10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: Cyanate and isocyanate. carbon oxides nitrogen oxides hydrogen cyanide

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
4-methyl-m-phenylene diisocyanate	LC50 Inhalation Vapor	Rat	0.48 mg/l	1 hours
•	LD50 Dermal	Rabbit	>9400 mg/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
heptan-2-one	LC50 Inhalation Vapor	Rat	16.7 mg/l	4 hours
	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Mutagenicity

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

Carcinogenicity

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

Classification

Product/ingredient name	OSHA	IARC	NTP
4-methyl-m-phenylene diisocyanate	-	2B	Reasonably anticipated to be a human carcinogen.

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.

Teratogenicity

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

United States Page: 9/15

Product name PR 1197 Part B

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
butanone 4-methyl-m-phenylene diisocyanate	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
heptan-2-one	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: brain.

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, peripheral nervous system, upper respiratory tract, skin, central

nervous system (CNS), 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 : Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

Skin contact: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin

reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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

Conclusion/Summary: There are no data available on the mixture itself. Skin contact to isocyanate monomer

may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Repeated exposure may lead

to permanent respiratory disability. 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

United States Page: 10/15

Date of issue 10 June 2021

Version 15

Product code PR 1197 Part B Product name PR 1197 Part B

Section 11. Toxicological information

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. 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

effects

: There are no data available on the mixture itself.

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 effects

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis. 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. 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)	(gases)	(vapors)	Inhalation (dusts and mists) (mg/ l)
PR 1197 Part B	3173.7	N/A	N/A	1.2	9
butanone	2737	6480	N/A	N/A	N/A
4-methyl-m-phenylene diisocyanate	5800	N/A	N/A	0.24	N/A
heptan-2-one	1600	10206	N/A	16.7	1.5

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
4-methyl-m-phenylene diisocyanate	Acute EC50 12.5 mg/l	Daphnia	48 hours
heptan-2-one	Acute LC50 131 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
heptan-2-one	OECD 310	69 % - Readily - 28 days	-	-

United States	Page: 11/15

Product code PR 1197 Part B Date of issue 10 June 2021

Product name PR 1197 Part B

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
4-methyl-m-phenylene diisocvanate	-	-	Not readily
heptan-2-one	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
b utanone	0.3	-	low
4-methyl-m-phenylene	3.43	-	low
diisocyanate			
heptan-2-one	2.26	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})

: 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	UN1866	UN1866	UN1866
UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
Transport hazard class (es)	3	3	3
Packing group	III	III	III

United States Page: 12/15

Version 15

Product name PR 1197 Part B

14. Transport information

Environmental hazards No. No. No.

Marine pollutant
substancesNot applicable.Not applicable.Not applicable.

Product RQ (lbs)4384.9Not applicable.Not applicable.

RQ substances (4-methyl-m-phenylene diisocyanate) Not applicable.

Additional information

: Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

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.

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.

United States - TSCA 12(b) - Chemical export notification:

4-methyl-m-phenylene diisocyanate One time notification

United States - TSCA 5(a)2 - Proposed significant new use rules:

4-methyl-m-phenylene diisocyanate Listed 80 FR 2068, Jan

15, 2015 (proposed rule)

SARA 302/304

SARA 304 RQ : 4384.9 lbs / 1990.7 kg [505.7 gal / 1914.2 L]

Composition/information on ingredients

		SARA 302 TPQ		SARA 304 RQ	
Name	EHS	(lbs)	(gallons)	(lbs)	(gallons)
4-methyl-m-phenylene diisocyanate	Yes.	500	-	100	-

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (inhalation) - Category 2
RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1B

HNOC - Defatting irritant

Composition/information on ingredients

United States Page: 13/15

Product name PR 1197 Part B

Section 15. Regulatory information

Name	%	Classification
butanone	≥5.0 - ≤7.3	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
4-methyl-m-phenylene diisocyanate	≥0.10 - ≤2.6	ACUTE TOXICITY (inhalation) - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1A CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
heptan-2-one	≥0.10 - ≤2.9	FLAMMABLE LIQUIDS - Ćategory 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant

SARA 313

<u>Chemical name</u> <u>CAS number</u> <u>Concentration</u>

Supplier notification: 4-methyl-m-phenylene diisocyanate 584-84-9 1 - 5

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

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

Section 16. Other information

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

Health: 3 * Flammability: 3 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 Protection Association (U.S.A.)

Health: 3 Flammability: 3 Instability: 0

Date of previous issue : 4/6/2021
Organization that prepared : EHS

the SDS

United States Page: 14/15

Product code PR 1197 Part B

Date of issue 10 June 2021

Product name PR 1197 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

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.

United States Page: 15/15

Version 15