SAFETY DATA SHEET



Date of issue/Date of revision 5 July 2022 Version 1

Section 1. Identification			
Product name	: Raven 405 (A-Side)		
Product code	: 00465052		
Other means of identification	: Not available.		
Product type	: Liquid.		
Relevant identified uses of the substance or mixture and uses advised against			
Product use	: Industrial applications, Professional applications, Used by spraying.		
Use of the substance/ mixture	: Coating.		
Uses advised against	: Not applicable.		
Manufacturer <u>Emergency telephone</u> <u>number</u>	 PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272 (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIO Interior do la Papública: 800 00 214 00 (Máxico) 		
	SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)		
Technical Phone Number	: 888-977-4762		

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 22.7% (oral), 24.9% (dermal), 97.7% (inhalation)
	This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or
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Product name Raven 405 (A-Side)

Section 2. Hazards identification

	engineering controls (see Section 8).
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory 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. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Emits toxic fumes when heated.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Product name	: Raven 405 (A-Side)

Ingredient name	%	CAS number
glass, oxide, chemicals	≥50 - ≤75 ≥20 - ≤50 ≥1.0 - ≤5.0	1675-54-3 65997-17-3 13463-67-7

SUB codes represent substances without registered CAS Numbers.

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

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Product name Raven 405 (A-Side)

Section 3. Composition/information on ingredients

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 effect	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
ndication of immediate med	dical 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. 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.
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Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon 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

disposal contractor.

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	ont	ainment 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

Product name Raven 405 (A-Side)

Section 6. Accidental release measures

Large spill

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

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Special precautions	: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. 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 above the following temperature: 50°C (122°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

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Section 8. Exposure controls/personal protection

ngredient name	Exposure limits
is-[4-(2,3-epoxipropoxi)phenyl]propane	None.
lass, oxide, chemicals	OSHA PEL (United States).
	TWA: 15 mg/m³
	TWA: 5 mg/m³ Form: Respirable
	TWA: 15 mg/m ³ Form: Total dust
	ACGIH TLV (United States).
	TWA: 1 f/cc Form: Continuous filament glass
	fibers
	TWA: 5 mg/m³, (Inhalable) Form:
	Continuous filament glass fibers
	TWA: 3 mg/m ³ Form: Respirable
	TWA: 10 mg/m ³ Form: Total dust
	ACGIH TLV (United States, 1/2021).
	[Continuous filament glass fibers]
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable
	fraction
	TWA: 1 f/cc 8 hours. Form: Respirable fibers:
	length greater than 5 uM; aspect ratio equal to
	or greater than 3:1 as determined by the
	membrane filter method at 400-450X
	magnification (4-mm objective) phase contrast
	illumination.
tanium dioxide	OSHA PEL (United States, 5/2018).
	TWA: 15 mg/m ³ 8 hours. Form: Total dust
	ACGIH TLV (United States, 1/2021).
	TWA: 10 mg/m ³ 8 hours.
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
7	- OCLA 20 CED 1010 1200 Subpart 7 Tayla and Hazardaya Substances		• •

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. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
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Section 8. Exposure controls/personal protection

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	: Chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: 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.
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	: Off-white.
Odor	: Faint odor.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 100°C (212°F)
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.

Product name Raven 405 (A-Side)

Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	Not available.
Relative density	: 1.07
Density(lbs / gal)	: 8.93
Solubility Partition coefficient: n- octanol/water	Insoluble in the following materials: cold water.Not applicable.
Viscosity	: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
Volatility	: 0% (v/v), 0.338% (w/w)
% Solid. (w/w)	: 99.662

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.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	-
	LD50 Oral	Mai	~5000 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

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Product name Raven 405 (A-Side)

Section 11. Toxicological information

Product/ingredient name	Result			Species	Score		Exposure	Observation
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mil	d irritant		Rabbit	-		24 hours	-
	Eyes - Re conjunctiv		the	Rabbit	0.4		24 hours	-
	Skin - Ede			Rabbit	0.5		4 hours	-
	Skin - Eryl		schar	Rabbit	0.8		4 hours	-
	Skin - Milo	l irritant		Rabbit	-		4 hours	-
Conclusion/Summary								
Skin				e on the mixt				
Eyes	: There ar	e no data	a availabl	e on the mixt	ure itself.			
Respiratory	: There ar	e no data	a availabl	e on the mixt	ure itself.			
Sensitization								
Product/ingredient name	Route of		Species			Resu	ilt	
	exposure							
bis-[4-(2,3-epoxipropoxi)	skin		Mouse			Sens	itizing	
phenyl]propane							-	
Conclusion/Summary						•		
Skin	: There ar	e no data	a availabl	e on the mixt	ure itself.			
Respiratory	: There ar	e no data	a availabl	e on the mixt	ure itself.			
<u>Mutagenicity</u>								
Conclusion/Summary	: There are	e no data	a availabl	e on the mixt	ure itself.			
Carcinogenicity								
Conclusion/Summary	: There ar	e no data	a availabl	e on the mixt	ure itself.			
Classification								
Product/ingredient name	OSHA	IARC	NTP					
		3						
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	3	-					
glass, oxide, chemicals	-	3	-					
titanium dioxide	-	2B	-					
Carcinogen Classification	code:	_	1					
IARC: 1, 2A, 2B, 3, NTP: Known to be OSHA: + Not listed/not regu	a human car	cinogen; F	Reasonably	anticipated to t	be a human	carcino	gen	

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)

Product name Raven 405 (A-Side)

Name		Category	Route of exposure	Target organs
glass, oxide, chemicals		Category 3	-	Respiratory tract irritation
Specific target organ toxic	ity (repeated exposure)			
Not available.				
<u>Target organs</u>	: Contains material wh tract, skin, eyes.	ich may cause damage	to the following or	gans: upper respiratory
Aspiration hazard Not available.				
nformation on the likely rou	ites of exposure			
Potential acute health effect	<u>ots</u>			
Eye contact Inhalation Skin contact Ingestion <u>Over-exposure signs/symp</u>	 Causes serious eye i May cause respirator Causes skin irritation No known significant 	y irritation. .May cause an allergic		
Eye contact	: Adverse symptoms n	any include the following	. .	
Inhalation Skin contact	 pain or irritation watering redness Adverse symptoms n respiratory tract irritat coughing Adverse symptoms n 	tion		
Ingestion	irritation redness : No specific data.			
Delayed and immediate effe		ects from short and lo	na term exposure	1
Conclusion/Summary	: There are no data av been classified as a 0 For many products, T this case, the TiO2 pa human exposure to u or roller. Sanding the depending on the dur personal protective e in the eyes, the liquid nausea, diarrhea and immediate effects an	ailable on the mixture it GHS Carcinogen Categ TiO2 is utilized as a raw articles are bound in a r inbound particles of TiC coating surface or mis ration and level of expose quipment and/or engine	self. This product of ory 2 based on its I material in a liquid natrix with no mean 2 when the product t from spray applica- sure and require the ering controls (see d reversible damagento account, where f components from	contains TiO2 which has ARC 2B classification. coating formulation. In ningful potential for it is applied with a brush ations may be harmful e use of appropriate e Section 8). If splashed ge. Ingestion may cause known, delayed and short-term and long-
<u>Short term exposure</u>				
Potential immediate effects	: There are no data av	ailable on the mixture it	self.	
Potential delayed effects Long term exposure	: There are no data av	ailable on the mixture it	self.	
			United S	tates Page: 10/14

N/A

Product name Raven 405 (A-Side)

Section 11. Toxicological information

Potential immediate effects	:	There are no data av	ailable on the	e mixture itse	lf.			
Potential delayed effects	:	There are no data av	There are no data available on the mixture itself.					
Potential chronic health ef		<u>:s</u>						
General	:	Once sensitized, a se very low levels.	evere allergic	reaction may	y occur when s	subsequently	exposed to	
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.						
Mutagenicity	:	No known significant	No known significant effects or critical hazards.					
Reproductive toxicity	:	No known significant effects or critical hazards.						
Numerical measures of toxi	city							
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)	

15000

23000

N/A

N/A

Section 12. Ecological information

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Toxicity

Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
titanium dioxide	Chronic NOEC 0.3 mg/l Acute LC50 >100 mg/l Fresh water	Daphnia Daphnia - Daphnia magna	21 days 48 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	-	Not readily

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Product name Raven 405 (A-Side)

Section 13. Disposal considerations

Disposal methods

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

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

	DOT	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
		(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)
Transport hazard class (es)	-	9	9
Packing group	-	III	III
Environmental hazards	No.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	Not applicable.

14. Transport information

Additional information

DOT	: None 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 prec	cautions 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

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Product name Raven 405 (A-Side)

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

 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Composition/information on ingredients

Name	%	Classification
bis-[4-(2,3-epoxipropoxi)phenyl] propane		SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
glass, oxide, chemicals	≥20 - ≤50	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
titanium dioxide	≥1.0 - ≤5.0	CARCINOGENICITY - Category 2

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

Section 16. Other information

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

Health : 2 * Flammability : 1 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 : 2Flammability : 1Instability : 0Date of previous issue: No previous validationOrganization that prepared: EHSthe SDS

Product name Raven 405 (A-Side)

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.