SAFETY DATA SHEET



Date of issue/Date of revision17 February 2017Version 4

Section 1. Identification			
Product name	: UNARCO RED		
Product code	: B12050HR60K		
Other means of identification	: Not available.		
Product type	: Powder.		
Relevant identified uses of the substance or mixture and uses advised against			
Product use	: Industrial applications.		
Use of the substance/ mixture	: Coating.		
Uses advised against	: Not applicable.		
Manufacturer	: PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272		
Emergency telephone number	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)		
Technical Phone Number	: 812-442-5080		

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	: COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 90.2%

GHS label elements Hazard pictograms



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Product name UNARCO RED

Section 2. Hazards identification

Signal word	: Danger
Hazard statements	 May form combustible dust concentrations in air. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. 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. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	 IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Photosensitive agents : In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes. In case of accidental skin contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the sources of UV light which may increase the sensitivity of the sources of UV light which may increase the sensitivity of skin.
Storage	: Store locked up.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	 Keep container tightly closed. Keep away from heat, sparks, open flames and hot surfaces No smoking. Sanding and grinding dusts may be harmful if inhaled. Prevent dust accumulation. Emits toxic fumes when heated.
Hazards not otherwise classified	: Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Product name	:	UNARCO RED

Ingredient name	%	CAS number
M mestone	≥20 - ≤50	1317-65-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)	≥20 - ≤50	25036-25-3
bis(4,1-phenyleneoxymethylene)]bis[oxirane]		
diiron trioxide	≥1.0 - ≤5.0	1309-37-1
proprietary monomer	≥1.0 - ≤5.0	Not available.
titanium dioxide	≤1.0	13463-67-7
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	<1.0	552-30-7

SUB codes represent substances without registered CAS Numbers.

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Product name UNARCO RED

Section 3. Composition/information on ingredients

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. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.
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. In case of accidental skin contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of skin.
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 eff	ects	
Eye contact	:	Causes serious eye irritation.
Inhalation	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	:	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/syn	nptom	<u>15</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 wheezing and breathing difficulties asthma
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
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Product name UNARCO RED

Section 4. First aid measures

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

Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing modia	
Extinguishing media	
Suitable extinguishing media	: Use dry chemical powder.
Unsuitable extinguishing media	: Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
Specific hazards arising from the chemical	: Fine dust clouds may form explosive mixtures with air. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds 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. 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 dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on
	appropriate personal protective equipment.

Product name UNARCO RED

Section 6. Accidental release measures

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	onta	ainment and cleaning up
Small spill	:	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	-	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. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. 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 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 ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. 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. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous.
Special precautions	 Do not reuse container. 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.

Product name UNARCO RED

Section 7. Handling and storage

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. 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

Ingredient name	Exposure limits	
Imestone	OSHA PEL (United States, 6/2016).	
	TWA: 5 mg/m ³ 8 hours. Form: Respirable	
	fraction	
	TWA: 15 mg/m ³ 8 hours. Form: Total dust	
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[None.	
(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]		
diiron trioxide	ACGIH TLV (United States, 3/2016).	
	TWA: 5 mg/m ³ 8 hours. Form: Respirable	
	fraction	
	OSHA PEL (United States, 6/2016).	
	TWA: 10 mg/m ³ 8 hours.	
proprietary monomer	ACGIH TLV (United States).	
, , , , , , , , , , , , , , , , , , ,	TWA: 5 mg/m ³ 8 hours. Form: Respirable	
	fraction	
	TWA: 10 mg/m ³ 8 hours. Form: Total	
titanium dioxide	OSHA PEL (United States, 6/2016).	
	TWA: 15 mg/m ³ 8 hours. Form: Total dust	
	ACGIH TLV (United States, 3/2016).	
	TWA: 10 mg/m ³ 8 hours.	
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	ACGIH TLV (United States, 3/2016).	
	Absorbed through skin. Skin sensitizer.	
	Inhalation sensitizer.	
	TWA: 0.0005 mg/m ³ 8 hours. Form:	
	Inhalable fraction and vapor	
	STEL: 0.002 mg/m ³ 15 minutes. Form:	
	Inhalable fraction and vapor	
A = Acceptable Maximum Peak	S = Potential skin absorption	
A = Acceptable Maximum Peak CGIH = American Conference of Governmental Industrial Hygienists.	S = Potential skin absorption SR = Respiratory sensitization	
C = Ceiling Limit	SS = Skin sensitization	
F = Fume	STEL = Short term Exposure limit values	

Product name UNARCO RED

Section 8. Exposure controls/personal protection

IPEL= Internal Permissible ExposuOSHA= Occupational Safety and HeR= RespirableZ= OSHA 29 CFR 1910.1200 S		TD= Total dustTLV= Threshold Limit ValueTWA= Time Weighted Average	
Consult local authorities for ac	ceptable exposure limits.		
Recommended monitoring : procedures	the ventilation or other control measures protective equipment. Reference shoul	ay be required to determine the effectiveness is and/or the necessity to use respiratory Id be made to appropriate monitoring standar ents for methods for the determination of	
controls	or mist, use process enclosures, local e to keep worker exposure to airborne co- limits. The engineering controls also ne below any lower explosive limits. Use e		ols utory s
Environmental exposure : controls	they comply with the requirements of er	cess equipment should be checked to ensure nvironmental protection legislation. In some eering modifications to the process equipmen to acceptable levels.	
Individual protection measures			
	eating, smoking and using the lavatory a Appropriate techniques should be used Contaminated work clothing should not contaminated clothing before reusing. If showers are close to the workstation loo	to remove potentially contaminated clothing. be allowed out of the workplace. Wash Ensure that eyewash stations and safety	
Eye/face protection : Skin protection	Chemical splash goggles.		
Hand protection :	worn at all times when handling chemic necessary. Considering the parameters during use that the gloves are still retain noted that the time to breakthrough for a	complying with an approved standard should cal products if a risk assessment indicates this s specified by the glove manufacturer, check ning their protective properties. It should be any glove material may be different for different xtures, consisting of several substances, the accurately estimated.	s is ent

Gloves	: butyl rubber polyethylene
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.

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Product name UNARCO RED

Section 9. Physical and chemical properties

Appearance

<u>rippoururioo</u>		
Physical state	:	Solid.
Color	1	Not available.
Odor	:	Not available.
Odor threshold	:	Not available.
рН	1	Not available.
Melting point	1	Not available.
Boiling point	1	Not available.
Flash point	1	Closed cup: Not applicable.
Material supports combustion.	1	Yes.
Auto-ignition temperature	:	Not available.
Decomposition temperature	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Evaporation rate	:	Not available.
Vapor pressure	1	Not available.
Vapor density	:	Not available.
Relative density	:	1.5
Density(lbs / gal)	:	12.52
Solubility	:	Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	:	Not available.
Viscosity	:	Kinematic (40°C (104°F)): Not applicable.
Volatility	:	0% (v/v), 0% (w/w)
% Solid. (w/w)	:	100

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.

Product name UNARCO RED

Section 10. Stability and reactivity

Hazardous decomposition products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result			Species	Dose	Exposure
diiron trioxide	LD50 Oral			Rat	10 g/kg	-
proprietary monomer	LC50 Inhal	ation Dusts	s and mists	Rat	>7.7 mg/l	4 hours
	LD50 Derm	nal		Rabbit	>7940 mg/kg	-
	LD50 Oral			Rat	5560 mg/kg	-
titanium dioxide	LD50 Oral			Rat	>11 g/kg	-
benzene-1,2,4-tricarboxylic	LC50 Inhal	ation Dusts	s and mists	Rat	>2330 mg/m³	4 hours
acid 1,2-anhydride						
	LD50 Oral			Rat	5.6 g/kg	-
Conclusion/Summary	: There are	no data a	vailable on th	ne mixture itself.		
Irritation/Corrosion						
Conclusion/Summary						
Skin	: There are	no data a	vailable on th	ne mixture itself.		
Eyes	: There are no data available on the mixture itself.					
Respiratory	: There are no data available on the mixture itself.					
<u>Sensitization</u>						
Conclusion/Summary						
Skin	: There are	e no data av	vailable on th	ne mixture itself.		
Respiratory	: There are no data available on the mixture itself.					
Mutagenicity						
Conclusion/Summary	nary : There are no data available on the mixture itself.					
Carcinogenicity						
Conclusion/Summary : There are no data available on the mixture itself.						
<u>Classification</u>						
Product/ingredient name	OSHA	IARC	NTP			
diiron trioxide	-	3	-			

titanium dioxide - 2B Carcinogen Classification code:

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

Reproductive toxicity

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 UNARCO RED

Section 11. Toxicological information

Name	Category
proprietary monomer	Category 3
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	Category 3

Specific target organ toxicity (repeated exposure)

NameCategorybenzene-1,2,4-tricarboxylic acid 1,2-anhydrideCategory 2

Target organs

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

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact	Causes serious eye irritation.
Inhalation	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympt	<u>oms</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 wheezing and breathing difficulties asthma
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Conclusion/Summary	: There are no data available on the mixture itself. Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. 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.

Product name UNARCO RED

Section 11. Toxicological information

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.		
<u>Long term exposure</u>			
Potential immediate	: There are no data available on the mixture itself.		
effects			
Potential delayed effects	: There are no data available on the mixture itself.		
Potential chronic health effe	<u>ts</u>		
General	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.		
Carcinogenicity	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.		
Mutagenicity	No known significant effects or critical hazards.		
Teratogenicity	No known significant effects or critical hazards.		
Developmental effects	No known significant effects or critical hazards.		
Fertility effects	No known significant effects or critical hazards.		
Numerical measures of toxic	Y		
Acute toxicity estimates			
Route	ATE value		
Øral	21678.5 mg/kg		

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
proprietary monomer	Acute EC50 59 mg/l	Aquatic plants	72 hours
	Acute EC50 46 mg/l	Daphnia	48 hours
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition : N coefficient (Koc)

: Not available.

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Product name UNARCO RED

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

	1		1
	DOT	IMDG	ΙΑΤΑ
UN number	Not regulated.	UN3077	UN3077
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
		(Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bis [oxirane])	(Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bis [oxirane])
Transport hazard class (es)	-	9	9
Packing group	-	Ш	Ш
Environmental hazards	No.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bis [oxirane])	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.				

Product name UNARCO RED

14. Transport information

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.

Section 15. Regulatory information

United States

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

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

<u>SARA 311/312</u>

Classification

: Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis [oxirane]	Yes.	No.	No.	Yes.	No.
proprietary monomer titanium dioxide benzene-1,2,4-tricarboxylic acid 1, 2-anhydride	No. No. Yes.	No. No. No.	No. No. No.	Yes. No. Yes.	No. Yes. Yes.

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 : 0 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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

Health	:	2	Flammab	ilit	ty	:	0	Instab	ility	1	0
Date of	prev	/ious	issue	:	1/	27/2	201	7			

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Product name UNARCO RED

Section 16. Other information

Organization that prepared the MSDS	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) 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.