SAFETY DATA SHEET



Date of issue/Date of revision 9 August 2016 Version 8

Section 1. Identification		
Product name	: 🔀 KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A	
Product code	: 00348931	
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, Used by spraying.	
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	: 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	 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 53.7%

GHS label elements

Version 8

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. 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.

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 3. Composition/information on ingredients

- Substance/mixture
- : Mixture
- Product name

: K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Ingredient name	%	CAS number
Talc , not containing asbestiform fibres	≥20 - ≤50	14807-96-6
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)	≥20 - ≤50	25036-25-3
bis(4,1-phenyleneoxymethylene)]bis[oxirane]		
1-methoxy-2-propanol	≥20 - ≤50	107-98-2
n-butyl acetate	≥10 - ≤20	123-86-4
titanium dioxide	≥1.0 - ≤5.0	13463-67-7
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7

SUB codes represent substances without registered CAS Numbers.

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

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

Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids 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 effe	ects
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. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/sym	iptoms

Date of issue 9 August 2016

Version 8

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 4. First aid measures

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 me	dical 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 elething theroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media Suitable extinguishing	: Use dry chemical, CO ₂ , water spray (fog) or foam.
media	
Unsuitable extinguishing media	: 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. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. 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.

give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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 : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from personnel 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 nonemergency personnel". **Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). 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. 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.

Version 8

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

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 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	: 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: 35°C (95°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

Ingredient name	Exposure limits
🗖 alc , not containing asbestiform fibres	ACGIH TLV (United States, 3/2015).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	fraction
	OSHA PEL Z3 (United States, 2/2013).
	TWA: 20 mppcf 8 hours. Form: not
	containing asbestos
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	None.
1-methoxy-2-propanol	ACGIH TLV (United States, 3/2015).
	STEL: 369 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	STEL. 100 ppm 15 minutes.
	United States Page: 6/15

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 8. Exposure controls/personal protection

	· · · · ·			
		TWA: 184 mg/m ³ 8 hours.		
n butul apatata		TWA: 50 ppm 8 hours.		
n-butyl acetate		ACGIH TLV (United States, 3/2015). STEL: 200 ppm 15 minutes.		
		TWA: 150 ppm 8 hours.		
		OSHA PEL (United States, 2/2013).		
		TWA: 710 mg/m ³ 8 hours. TWA: 150 ppm 8 hours.		
titopium diovido				
titanium dioxide		OSHA PEL (United States, 2/2013).		
		TWA: 15 mg/m ³ 8 hours. Form: Total dust		
		ACGIH TLV (United States, 3/2015).		
an stalling siling an an inchis and		TWA: 10 mg/m ³ 8 hours.		
crystalline silica, respirable pov	vder (<10 microns)	OSHA PEL Z3 (United States, 2/2013).		
		TWA: 10 mg/m ³ / (%SiO2+2) 8 hours. Form		
		Respirable		
		TWA: 250 mppcf / (%SiO2+5) 8 hours. For		
		Respirable		
		ACGIH TLV (United States, 3/2015).		
		TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction		
		OSHA PEL Z3 (United States).		
		TWA: 30 mg/m ³ Form: Total dust		
		TWA. 30 mg/m² Form. Total dust		
	Key to abbreviation			
A = Acceptable Maximum Peak		S = Potential skin absorption		
ACGIH = American Conference of Governmental Industrial Hygienists.		SR = Respiratory sensitization SS = Skin sensitization		
C = Ceiling Limit 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		
	Subpart Z - Toxic and Hazardous Substance	'S		
Consult local authorities for ac	ceptable exposure limits.			
Recommended monitoring : procedures	atmosphere or biological monitorin the ventilation or other control mea protective equipment. Reference Reference to national guidance do	s with exposure limits, personal, workplace ng may be required to determine the effectiveness of asures and/or the necessity to use respiratory should be made to appropriate monitoring standards ocuments for methods for the determination of		
		ocuments for methods for the determination of		

Appropriate engineering	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or
controls	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	: Emissions from ventilation or work process equipment should be checked to ensure
controls	they comply with the requirements of environmental protection legislation. In some

will be necessary to reduce emissions to acceptable levels.

cases, fume scrubbers, filters or engineering modifications to the process equipment

Individual protection measures

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 8. Exposure controls/personal protection

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 <u>Skin protection</u>	: Chemical splash goggles.
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. When there is a risk of ignition from static electricity, wear anti-static 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.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 27.78°C (82°F)
Material supports combustion.	: Yes.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.57% Upper: 10.27%

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 9. Physical and chemical properties

Evaporation rate	: 0.79 (butyl acetate = 1)
Vapor pressure	: 1.5 kPa (11.5 mm Hg) [room temperature]
Vapor density	: Not available.
Relative density	: 1.32
Density (lbs / gal)	: 11.02
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)
Volatility	: 50% (v/v), 34.676% (w/w)
% Solid. (w/w)	: 65.324

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	: 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
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
titanium dioxide	LD50 Oral	Rat	>11 g/kg	-

Irritation/Corrosion

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 11. Toxicological information

Conclusion/Summary				
Skin	1	There are	e no data av	vailable on the mixture itself.
Eyes	1	There are	e no data av	vailable on the mixture itself.
Respiratory	1	There are	e no data av	vailable on the mixture itself.
Sensitization				
Conclusion/Summary				
Skin	1	There are	e no data av	vailable on the mixture itself.
Respiratory	1	There are	e no data av	vailable on the mixture itself.
Mutagenicity				
Conclusion/Summary	1	There are	e no data av	vailable on the mixture itself.
Carcinogenicity				
Conclusion/Summary	:	There are	e no data av	vailable on the mixture itself.
Classification				
Product/ingredient name		OSHA	IARC	NTP

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide crystalline silica, respirable powder (<10 microns)	-	2B 1	- Known 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.

Specific target organ toxicity (single exposure)

Name	Category
Talc , not containing asbestiform fibres	Category 3
1-methoxy-2-propanol	Category 3
n-butyl acetate	Category 3

Specific target organ toxicity (repeated exposure)

Name	Category
1-methoxy-2-propanol	Category 2
crystalline silica, respirable powder (<10 microns)	Category 1

Target organs

: Contains material which causes damage to the following organs: brain. Contains material which may cause damage to the following organs: kidneys, lungs, liver, heart, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Aspiration hazard

Not available.

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 11. Toxicological information

Information on the likely routes of exposure

Potentia	acute	health	effects

Potential acute fieditif effect	<u>5</u>
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. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression.
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 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.
	ts and also chronic effects from short and long term exposure
Conclusion/Summary	: There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. 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 effects	: There are no data available on the mixture itself.
Potential delayed effects Long term exposure	: There are no data available on the mixture itself.

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 11. Toxicological information

Potential immediate effects	: There are no data available on the mixture itself.		
Potential delayed effects	: There are no data available on the mixture itself.		
Potential chronic health eff	<u>ects</u>		
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.		
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.		
Mutagenicity	No known significant effects or critical hazards.		
Teratogenicity	: 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	<u>sity</u>		
Acute toxicity estimates			
Route	ATE value		
Oral	44639.9 mg/kg		

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	1.78	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

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 mormation			
	DOT	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	Ш	Ш
Environmental hazards	No.	Yes.	No.
Marine pollutant substances	Not applicable.	(Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bis [oxirane])	
Product RQ (lbs)	27992.9	Not applicable.	Not applicable.
RQ substances	(xylene, n-butyl acetate)	Not applicable.	Not applicable.

14. Transport information

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	: The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

Date of issue 9 August 2016

Version 8

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

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
Talc, not containing asbestiform fibres Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis [oxirane]	No. Yes.	No. No.	No. No.	Yes. Yes.	No. No.
1-methoxy-2-propanol n-butyl acetate titanium dioxide crystalline silica, respirable powder (<10 microns)	Yes. Yes. No. No.	No. No. No. No.	No. No. No. No.	Yes. Yes. No. 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.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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 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.

United States Page: 14/15

Version 8

Product name K&L KOLOR-POXY CARDINAL RED S/G ENAMEL RED-A

Section 16. Other information

The customer is responsible f	for determining the PPE code for this material.
National Fire Protection Assoc	ciation (U.S.A.)
Health : 2 Flammabi	ility : 3 Instability : 0
Date of previous issue	: 5/1/2016
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.