SAFETY DATA SHEET



Date of issue/Date of revision 16 April 2016 Version 10

Section 1. Identification		
Product name	: CA 8273/I7475 BASE COMPONENT	
Product code	: CA 8273/I7475 BASE COMPONENT	
Other means of identification	: Not available.	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
Product use	: Industrial applications.	
Use of the substance/ mixture	: Coating.	
Uses advised against	: Not applicable.	
Manufacturer	: PPG Aerospace PRC-DeSoto 12780 San Fernando Road Sylmar, CA 91342	
Emergency telephone number	Phone: 818 362 6711 : (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)	

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 AMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 17.2%
GHS label elements Hazard pictograms	
Signal word	: Warning
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Section 2. Hazards identification

Hazard statements	 Flammable liquid and vapor. Harmful if swallowed. Causes serious eye irritation. Suspected of damaging the unborn child. 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. 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. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: IF exposed or concerned: Get medical attention. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	1	Mixture
Product name	1	CA 8273/I7475 BASE COMPONENT

Ingredient name	%	CAS number
butanone	≥10 - ≤17	78-93-3
1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1,	≥10 - ≤20	69929-19-7
2-ethanediol, hexanedioic acid and 1,6-hexanediol		
heptan-2-one	≥5.0 - ≤10	110-43-0
titanium dioxide	≥5.0 - ≤10	13463-67-7
pentane-2,4-dione	≥1.0 - ≤5.0	123-54-6
2,6-dimethylheptan-4-one	≥1.0 - ≤4.7	108-83-8
Acetic acid, C8-10-branched alkyl esters, C9-rich	≥0.10 - ≤2.4	108419-33-6
carbon black, respirable powder	≤1.0	1333-86-4
toluene	<1.0	108-88-3

SUB codes represent substances without registered CAS Numbers.

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

Product code CA 8273/I7475 BASE COMPONENT

Product name CA 8273/I7475 BASE COMPONENT

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

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Potential acute health effects	
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Harmful if swallowed.
Over-exposure signs/sympto	<u>ms</u>
Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Section 4. First aid measures

Indication of immediate med	lical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures		
Extinguishing media		
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.	
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 harmful 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 dioxide carbon monoxide sulfur oxides metal oxide/oxides	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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	ont	ainment 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.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Special precautions	: 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.
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Section 7. Handling and storage

Conditions for safe storage,	: Do not store above the following temperature: 35°C (95°F). Store in accordance with
including any	local regulations. Store in a segregated and approved area. Store in original container
incompatibilities	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
butanone	ACGIH TLV (United States, 3/2015). STEL: 885 mg/m ³ 15 minutes. STEL: 300 ppm 15 minutes. TWA: 590 mg/m ³ 8 hours.
	TWA: 200 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 590 mg/m ³ 8 hours. TWA: 200 ppm 8 hours.
1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1, 3-propanediol, 1,2-ethanediol, hexanedioic acid and 1,6-hexanediol	None.
heptan-2-one	ACGIH TLV (United States, 3/2015). TWA: 233 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
	OSHA PEL (United States, 2/2013). TWA: 465 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
titanium dioxide	OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2015).
pentane-2,4-dione	TWA: 10 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2015). Absorbed through skin. TWA: 25 ppm 8 hours.
2,6-dimethylheptan-4-one	ACGIH TLV (United States, 3/2015). TWA: 145 mg/m ³ 8 hours. TWA: 25 ppm 8 hours.
	OSHA PEL (United States, 2/2013). TWA: 290 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
Acetic acid, C8-10-branched alkyl esters, C9-rich	None.
carbon black, respirable powder	ACGIH TLV (United States, 3/2015). TWA: 3 mg/m ³ 8 hours. Form: Inhalable
	fraction OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m ³ 8 hours.

Section 8. Exposure controls/personal protection AMP: 500 ppm 10 minutes. CEIL: 300 ppm TWA: 200 ppm 8 hours. ACGIH TLV (United States, 3/2015). TWA: 20 ppm 8 hours. Key to abbreviations = Acceptable Maximum Peak S = Potential skin absorption Α ACGIH = American Conference of Governmental Industrial Hygienists. SR = Respiratory sensitization SS С = Ceiling Limit = 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 TWA = Respirable = Time Weighted Average R Ζ = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances Consult local authorities for acceptable exposure limits. **Recommended monitoring** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of procedures 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 : 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. Emissions from ventilation or work process equipment should be checked to ensure **Environmental exposure** controls they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Individual protection measures **Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that evewash stations and safety

showers are close to the workstation location. Eye/face protection Skin protection Chemical splash goggles. 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.

Section 8. Exposure controls/personal protection

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Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: butyl rubber May be used: nitrile rubber, Chloroprene
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

Appearance		
Physical state	1	Liquid.
Color	1	Brown.
Odor	1	Not available.
Odor threshold	1	Not available.
рН	4	Not available.
Melting point	4	Not available.
Boiling point	1	>37.78°C (>100°F)
Flash point	1	Closed cup: 28.89°C (84°F)
Material supports combustion.	:	Yes.
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Evaporation rate	1	Not available.
Vapor pressure	1	Not available.
Vapor density	1	Not available.
Relative density	1	1.2
Density(lbs / gal)	:	10.01
Solubility	:	Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	1	Not available.
Viscosity	:	Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)

Section 9. Physical and chemical properties

VOC

: 492 g/l

Section 10. Stability and reactivity	
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: 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
butanone	LC50 Inhalation Vapor	Rat	11243 ppm	4 hours
	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
heptan-2-one	LC50 Inhalation Vapor	Rat	>16.7 mg/l	4 hours
•	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
titanium dioxide	LD50 Oral	Rat	>11 g/kg	-
pentane-2,4-dione	LC50 Inhalation Vapor	Rat	1225 ppm	4 hours
•	LD50 Dermal	Rabbit	787.4 mg/kg	-
	LD50 Oral	Rat	55 mg/kg	-
2,6-dimethylheptan-4-one	LC50 Inhalation Vapor	Rat	11637 mg/m ³	4 hours
	LD50 Dermal	Rabbit	16 g/kg	-
	LD50 Oral	Rat	5750 mg/kg	-
carbon black, respirable	LD50 Dermal	Rabbit	>3 g/kg	-
powder				
	LD50 Oral	Rat	>15400 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LC50 Inhalation Vapor	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	636 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Section 11. Toxicological information

Conclusion/Summary				
Skin	: The	re are	e no data av	vailable on the mixture itself.
Eyes	: The	re are	e no data av	vailable on the mixture itself.
Respiratory	: The	re are	e no data av	vailable on the mixture itself.
Sensitization				
Conclusion/Summary				
Skin	: The	re are	e no data av	vailable on the mixture itself.
Respiratory	: The	re are	e no data av	vailable on the mixture itself.
Mutagenicity				
Conclusion/Summary	: The	re are	e no data av	vailable on the mixture itself.
Carcinogenicity				
Conclusion/Summary	: The	re are	e no data av	vailable on the mixture itself.
Classification				
Product/ingredient name	OSH	A	IARC	NTP
titanium dioxide	-		2B	-
carbon black, respirable powder	-		2B	-

3

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

toluene

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

Specific target organ toxicity (single exposure)

Name	Category
butanone	Category 3
2,6-dimethylheptan-4-one	Category 3
Acetic acid, C8-10-branched alkyl esters, C9-rich	Category 3
toluene	Category 3

Specific target organ toxicity (repeated exposure)

Name	Category
toluene	Category 2

Target organs

: Contains material which causes damage to the following organs: mucous membranes, brain, .

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

Aspiration hazard

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Section 11. Toxicological information

Name	Result
2,6-dimethylheptan-4-one	ASPIRATION HAZARD - Category 1
Acetic acid, C8-10-branched alkyl esters, C9-rich	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : Defatting to the skin. May cause skin dryness and irritation. Ingestion : Harmful if swallowed. Over-exposure signs/symptoms Eye contact Eye contact : Adverse symptoms may include the following: pain or irritation watering reduces Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Ingestion : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Delayed and immediate offects and also chronic effects from short and long term exposure Conclusion/Summary : There are no data available on the mixture itself. Exposure to component solv concentrations in excess of the stated occupational exposure limit may result in headth effects such as mucous membrane and respiratory system irritation and effects or to he kidneys, liver and central nervous system. Symptoms and signs headache, dizzines, fatigue, muscular weakness, drowsiness and, in extreme loss of consciousness. Solvents may cause some of the above effects by abs through the skin. There is some evidence that repeated exposure to organic s expected from exposure to noise alone. If splashed in the eyes, the liquid may irritation and reversible damage.	Potential acute health effec	•
Inhalation : No known significant effects or critical hazards. Skin contact : Defatting to the skin. May cause skin dryness and irritation. Ingestion : Harmful if swallowed. Over-exposure signs/symptoms : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Ingestion : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Delayed and immediate effects and also chronic effects from short and long term exposure Conclusion/Summary : There are no data available on the mixture itself. Exposure to component solw concentrations in excess of the stated occupational exposure limit may result in headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme loss of consciousness. Solvents may cause some of the above effects by abs through the skin. There is some evidence that repeated exposure to organic s vapors in combination with constant loud noise can cause greater hearing loss expected from exposure of solvents may cause greater hearing loss expected from exposure of companies and aid effects of components from short-term and long-term exposure by oral, inhatat dermal routes of ex		—
Skin contact : Defatting to the skin. May cause skin dryness and irritation. Ingestion : Harmful if swallowed. Over-exposure signs/symptoms Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Ingestion : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Dataset and immediate effects and also chronic effects from short and long term exposure Conclusion/Summary : There are no data available on the mixture itself. Exposure limit may result in health effects such as mucous membrane and respiratory system irritation and effects on the kidneys, liver and central nervous system. Symptoms and signs headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme loss of consciousness. Solvents may cause gorne of the above effects by abs through the skin. There is some evidence that repeated exposure to organic s vapors in combination with constant loud noise can cause greater hearing loss urritation and reversible damage. Ingestion may cause quest, heiliquid may irritation and reversible damage. Ingestion may cause quest, the liquid may irritation and reversible damage. Ingestion ma	· · · · · · · · · · · · · · · · · · ·	-
Ingestion : Harmful if swallowed. Over-exposure signs/symptoms Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Ingestion : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Delayad and immediate effects and also chronic effects from short and long term exposure Conclusion/Summary : There are no data available on the mixture itself. Exposure to component solv concentrations in excess of the stated occupational exposure init may result in health effects on the kidneys, liver and central nervous system. Symptoms and signs headache, dizzness, fatigue, muscular weakness, drowsiness and, in extreme loss of consciousness. Solvents may cause assee of the above effects by abs through the skin. There is some evidence that repeated exposure to organic s vapors in combination with constant loud noise cause grater hearing loss expected from exposure to noise alone. If splashed in the eyes, the liquid may irritation and reversible damage. Ingestion may cause nausea, diarrhea and vor This takes into cause frashed and ismediate effects and also effects of components from short-term and long-term exposure by oral, inhalat dermal routes of exposure and eye contact. Short term exposure : There are no data available on		
Over-exposure signs/symptoms Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Ingestion : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Delayed and immediate effects and also chronic effects from short and long term exposure Conclusion/Summary : There are no data available on the mixture itself. Exposure to component solv concentrations in excess of the stated occupational exposure limit may result in health effects such as muccous membrane and respiratory system irritation and effects on the kidneys, liver and central nervous system. Symptoms and signs headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme loss of consciousness. Solvents may cause some of the above effects by abset through the skin. There is some evidence that repeated exposure to organic s vapors in combination with constant loud noise can cause greater hearing loss expected from exposure to noise alone. If splashed in the eyes, the liquid may irritation and reversible damage. Ingestion may cause nuscea, diarrhea and w w This takes into account, where known, delayed and immediate effects and also effects of components from short-term and long-term exposure by oral, inhalat dermal routes of exposure and eye contact. Short term exposure : There are no data a		o <i>i i</i>
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-		: There are no data available on the mixture itself.
United States Page	Potential delayed effects	: There are no data available on the mixture itself.
		United States Page: 11/15

Section 11. Toxicological information

Long 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.
Potential chronic health eff	
General	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	Suspected of damaging the unborn child.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Numerical measures of toxi	
Acute toxicity estimates	
Route	ATE value

Oral	1636.6 mg/kg
Dermal	13223 mg/kg
Inhalation (gases)	43063.3 ppm
Inhalation (vapors)	30.68 mg/l
Inhalation (dusts and mists)	14.35 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Product/ingredient name Aquatic half-life		Photolysis	Biodegradability	
toluene	-	-	Readily	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
butanone	0.29	-	low
heptan-2-one	1.98	-	low
pentane-2,4-dione	0.4	-	low
toluene	2.73	8.32	low

Mobility in soil

Soil/water partition coefficient (Koc) : Not available.

United States Page: 12/15

Section 12. Ecological information

Section 13. Disposal considerations

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

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

14. Transport Information			
	DOT	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	III	Ш
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (Ibs)	21436.7	Not applicable.	Not applicable.
RQ substances	(xylene, butanone)	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	: None identified.
ΙΑΤΑ	: None identified.

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

14. Transport information

Section 15. Regulatory information

United States

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

United States - TSCA 5(a)2 - Proposed significant new use rules: pentane-2,4-dione

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

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
butanone	Yes.	No.	No.	Yes.	No.
1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1, 2-ethanediol, hexanedioic acid and 1, 6-hexanediol	Yes.	No.	No.	Yes.	No.
heptan-2-one	Yes.	No.	No.	Yes.	No.
titanium dioxide	No.	No.	No.	No.	Yes.
pentane-2,4-dione	Yes.	No.	No.	Yes.	No.
2,6-dimethylheptan-4-one	Yes.	No.	No.	Yes.	No.
Acetic acid, C8-10-branched alkyl esters, C9-rich	Yes.	No.	No.	Yes.	No.
carbon black, respirable powder	Yes.	No.	No.	No.	Yes.
toluene	Yes.	No.	No.	Yes.	Yes.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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

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

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings 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.

Date of issue 16 April 2016

Version 10

Listed

Section 16. Other information

The customer is responsible	for determining the PPE code for this material.
National Fire Protection Asso	ociation (U.S.A.)
Health : 3 Flammal	bility : 3 Instability : 0
Date of previous issue	: 2/4/2016
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.