SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to Hazardous Product Regulations 2015.

Date of issue/Date of revision 4 December 2023 Version 9.03

Section 1. Identification	
Product name	: AMCOAT 450H F/S 36293RESI
Product code	: AT45H293/05
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, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.
Supplier	 PPG Architectural Coatings Canada, Inc. 1550, rue Ampère, bureau 500 Boucherville (Québec) J4B 7L4 Canada +1 450-655-3121
	PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272
<u>Emergency telephone</u> number	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)
Technical Phone Number	: 888-977-4762

Section 2. Hazard identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	RESPIRATORY SENSITIZATION - Category 1A
Substance of mixture	SKIN SENSITIZATION - Category 1A
	CARCINOGENICITY - Category 2
	TOXIC TO REPRODUCTION - Category 2
	Health Hazards Not Otherwise Classified - Category 1
	This product contains TiO2 which has been classified as a GHS Carcinogen
	Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized
	as a raw material in a liquid coating formulation. In this case, the TiO2 particles are
	bound in a matrix with no meaningful potential for human exposure to unbound
	particles of TiO2 when the product is applied with a brush or roller. Sanding the
	coating surface or mist from spray applications may be harmful depending on the
	duration and level of exposure and require the use of appropriate personal

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Product name AMCOAT 450H F/S 36293RESI

Section 2. Hazard identification

protective equipment and/or engineering controls (see Section 8).

GHS label elements		
Hazard pictograms		
Signal word	anger	
Hazard statements	ammable liquid and vapor. ay cause an allergic skin reaction. ay cause allergy or asthma symptoms or breathing difficulties if inhaled. ispected of causing cancer. ispected of damaging fertility or the unborn child. olonged or repeated contact may dry skin and cause irritation.	
Precautionary statements		
Prevention	otain special instructions before use. Do not handle until all safety precau- ive been read and understood. Wear protective gloves, protective clothin e or face protection. Wear respiratory protection. Keep away from heat, rfaces, sparks, open flames and other ignition sources. No smoking. Avo- eathing vapor. Contaminated work clothing should not be allowed out of to prkplace.	g and hot pid
Response	exposed or concerned: Get medical advice or attention. IF INHALED: Reprised to fresh air and keep comfortable for breathing. If experiencing respondents: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take mediately all contaminated clothing. Rinse skin with water. IF ON SKIN: th plenty of water. If skin irritation or rash occurs: Get medical advice or a	oiratory off Wash
Storage	ore locked up.	
Disposal	spose of contents and container in accordance with all local, regional, nat d international regulations.	ional
Supplemental label elements	bisture-sensitive material. Sanding and grinding dusts may be harmful if in epeated exposure to high vapor concentrations may cause irritation of the spiratory system and permanent brain and nervous system damage. Inhat por/aerosol concentrations above the recommended exposure limits caus adaches, drowsiness and nausea and may lead to unconsciousness or d in contact to isocyanate monomer may lead to allergic lung reaction. Bas e properties of the isocyanate components and considering toxicological of nilar mixtures, this mixture may cause acute irritation and/or sensitization spiratory system, leading to an asthmatic condition, wheezing and tightne est. Sensitized persons may subsequently show asthmatic symptoms wh posed to atmospheric concentrations well below the OEL. Repeated expo ay lead to permanent respiratory disability. Persons with a history of skin nsitization problems or asthma, allergies or chronic or recurrent respirato sease should not be employed in any process in which this product is use ntact with skin and clothing. Wash thoroughly after handling. Emits toxic to then heated. ercentage of the mixture consisting of ingredient(s) of unknown acute toxic	lation of ses leath. data on of the ss of the en osure ry d. Avoid fumes

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 50% (oral), 50% (dermal), 40.9% (inhalation)

Product name AMCOAT 450H F/S 36293RESI

Section 3. Composition/information on ingredients

Substance/mixture Product name	: Mixture : AMCOAT 450H F/S 36293RESI
Other means of identification	: Not available.

CAS number/other identifiers

Ingredient name	Synonyms	% (w/w)	CAS number	
n-butyl acetate	Acetic acid, butyl ester; Butyl Acetate; n- Butyl-acetate; Butyl ethanoate; n-Butyl ester of acetic acid; product composed of hydrocarbons (predominantly paraffinic and naphthenic) and n-butyl acetate; 1-butyl acetate; 1-Acetoxybutane; Butyl ester, Acetic acid; normal butyl acetate; Acetic acid, n-butyl ester	10 - 30*	123-86-4	
titanium dioxide	Titanium oxide; Titanium oxide (TiO2); Cl 77891; Titanium peroxide; Rutile; C.I. Pigment White 6; titanium dioxide coated with isopropoxytitanium triisostearate, containing by weight 1,5 % or more but not more than 2,5 % of isopropoxytitanium triisostearate; glass flakes (CAS RN 65997-17-3): — of a thickness of 0,3 µm or more but not more than 10 µm, and — coated with titanium dioxide (CAS RN 13463-67-7) or iron oxide (CAS RN 18282- 10-5); titanium dioxide, other than those of heading 3206 11 00; C.I. 77891; E 171; titanium(IV) oxide, other than those of heading 3206 11 00	7 - 13*	13463-67-7	
Nepheline syenite	potassium, sodium, oxido-oxo- oxoalumanyloxysilane	7 - 13*	37244-96-5	
Wollastonite	Calcium silicate; calcium silicate, naturally occurring as wollastonite; Wollastonite (Ca (SiO3)); Fibres-Natural Mineral Fibres, Wollastonite; Aedelforsite; CALCIUM METASILICATES; wollastonite dust; wollastonie; calcium,dioxido(oxo)silane	5 - 10*	13983-17-0	
2-methoxy-1-methylethyl acetate	2-Propanol, 1-methoxy-, 2-acetate; Propylene glycol monomethyl ether acetate; 2-Propanol, 1-methoxy-, acetate; 1-Methoxy-2-propanol, acetate; 2-Acetoxy-1-methoxypropane; Propylene glycol monoethyl ether acetate; Propylene glycol methyl ether acetate; 1-Methoxypropyl-2-acetate; 1-Methoxy- 2-propanol acetate; light stabiliser containing: — branched and linear alkyl esters of 3-(2H-benzotriazolyl)-5- (1,1-dimethylethyl)	1 - 5*	108-65-6	

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Section 3. Composition/information on ingredients

	-4-hydroxybenzenepropanoic acid (CAS RN 127519-17-9), and — 1-methoxy- 2-propyl acetate (CAS RN 108-65-6); Acetic acid, 2-methoxy-1-methylethyl ester		
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester; Decanedioic acid, bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester; bis(1,2,2,6,6-pentamethylpiperidin-4-yl) decanedioate; Bis(1,2,2,6,6-pentamethyl- 4-piperidinyl) decanedioate; Bis (1,2,2,6,6-pentamethyl-4-piperidyl) decanedioate; Decanedioic acid bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester; DECANEDIOATE, BIS (1,2,2,6,6-PENTAMETHYL-4- PIPERIDINYL) (PICCS); Bis(N-methyl- 2,2,6,6-tetramethyl-4-piperidinyl) sebacate; Bis(1,2,2,6,6-pentamethyl- 4-piperidyl) 1,8-octanedicarboxylate; Bis (1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate; DECANEDIOATE, BIS (1,2,2,6,6-PENTAMETHYL-4- PIPERIDINYL)	0.1 - 1*	41556-26-7
carbon black	Lampblack; Acetylene black; C.I. 77266; C.I. Pigment Black 6; C.I. Pigment Black 7; Charcoal	0.1 - 1*	1333-86-4
4-isocyanatosulphonyltoluene	tosyl isocyanate; p-toluenesulphonyl isocyanate; Benzenesulfonyl isocyanate, 4-methyl-; p-Toluenesulfonyl isocyanate; 4-Toluenesulphonyl isocyanate; 4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulfonyltoluene; 4-TOLUENE- SULFONYL-ISOCYANATE; TOSYL ISOCYANATE, PARA-; 4-methyl-N- (oxomethylidene)benzenesulfonamide	0.1 - 1*	4083-64-1
ethylbenzene	Benzene, ethyl-; Phenylethane; Ethylbenzol; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); EB; Mono-(or di-) methyl (ethyl,bromoallyl, bromopropyloxycarbonyl) orchloropropyloxycarbonyl) benzene	0.1 - 1*	100-41-4
methyl 1,2,2,6,6-pentamethyl- 4-piperidyl sebacate	Decanedioic acid, 1-methyl 10- (1,2,2,6,6-pentamethyl-4-piperidinyl) ester; Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester; methyl 1,2,2,6,6-pentamethylpiperidin-4-yl	0.1 - 1*	82919-37-7

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Section 3. Composition/information on ingredients

		-	
	decanedioate; methyl 1,2,2,6,6-pentamethylpiperidin-4-yl sebacate; Decanedioic acid methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester; Methyl 1,2,2,6,6-pentamethyl-4-piperidiyl sebacate; Methyl 1,2,2,6,6-pentamethyl- 4-piperidinyl sebacate; DECANEDIOATE, METHYL, 1,2,2,6,6-PENTAMETHYL- 4-PIPERIDINYL; Methyl 1,2,2,6,6-pentamethyl-4-piperidyl) sebacate		
n-butyl methacrylate	butyl methacrylate; 2-Propenoic acid, 2-methyl-, butyl ester; Methacrylic acid, butyl ester; METHACRYLIC ACID, N- BUTYL ESTER; Butyl 2-methacrylate; 2-Methyl butylacrylate; Butyl 2-methyl- 2-propenoate; Methacrylic acid-n-butyl ester; Bma; Alkyl(C2-20) methacrylate; 2-Methyl-2-propenoic acid butyl ester	0.1 - 1*	97-88-1

*Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

SUB codes represent substances without registered CAS Numbers.

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

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

Section 4. First-aid measures

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

Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympto	<u>ms</u>

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Section 4. First-aid measures

Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness 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
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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Section 5. Fire-fighting measures

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, protect	tiv	e equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for 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.
Special provisions	:	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

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Section 7. Handling and storage

Ρ	re	<u>caι</u>	<u>itio</u>	ns ·	<u>for</u>	safe	hand	ling

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. 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.
- Conditions for safe storage, including any incompatibilities
 Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
 Precautions should be taken to minimize exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurization.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
n-butyl acetate	CA Alberta Provincial (Canada, 6/2018).
	Skin sensitizer.
	OEL: 950 mg/m ³ 15 minutes.
	OEL: 200 ppm 15 minutes.
	OEL: 713 mg/m ³ 8 hours.
	OEL: 150 ppm 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 200 ppm 15 minutes.
	TWA: 150 ppm 8 hours.
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Section 8. Exposure controls/personal protection

	CA Ontario Provincial (Canada, 6/2019).
	[butyl acetates, all isomers] STEL: 150 ppm 15 minutes.
	TWA: 50 ppm 8 hours. CA British Columbia Provincial (Canada,
	6/2022). [butyl acetate, all isomers]
	STEL: 150 ppm 15 minutes.
	TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022).
	[butyl acetates (all isomers)]
	STEV: 150 ppm 15 minutes.
	TWAEV: 50 ppm 8 hours.
titanium dioxide	CA British Columbia Provincial (Canada,
	6/2022). [Titanium dioxide] TWA: 10 mg/m ³ 8 hours. Form: Total dust
	TWA: 3 mg/m ³ 8 hours. Form: respirable
	fraction
	CA Quebec Provincial (Canada, 6/2022). TWAEV: 10 mg/m ³ 8 hours. Form: Total
	dust. CA Alberte Browingiel (Canada, 6/2018)
	CA Alberta Provincial (Canada, 6/2018). Skin sensitizer.
	OEL: 10 mg/m ³ 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013). STEL: 20 mg/m³ 15 minutes.
	TWA: 10 mg/m ² 8 hours.
	CA Ontario Provincial (Canada, 6/2019).
	TWA: 10 mg/m ³ 8 hours. Form: total dust
Nepheline syenite	CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m³ 8 hours. Form: Total dust
Wollastonite	CA British Columbia Provincial (Canada, 6/2022).
	TWA: 1 mg/m³ 8 hours. Form: Inhalable
	CA Ontario Provincial (Canada, 6/2019).
	TWA: 1 mg/m ³ 8 hours. Form: Inhalable
	particulate matter. CA Quebec Provincial (Canada, 6/2022).
	[Wollastonite]
	TWAEV: 5 mg/m³ 8 hours. Form:
	Respirable dust. TWAEV: 10 mg/m³ 8 hours. Form: Total
	dust.
2-methoxy-1-methylethyl acetate	CA British Columbia Provincial (Canada, 6/2022).
	STEL: 75 ppm 15 minutes.
	TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019).
	TWA: $270 \text{ mg/m}^3 8 \text{ hours.}$
	TWA: 50 ppm 8 hours.
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate carbon black	None. CA British Columbia Provincial (Canada,
	L'A British L'Allimbia Dravinaval (Casada

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Section 8. Exposure controls/personal protection

	•
	 TWA: 3 mg/m³ 8 hours. Form: Inhalable CA Ontario Provincial (Canada, 6/2019). TWA: 3 mg/m³ 8 hours. Form: Inhalable particulate matter. CA Quebec Provincial (Canada, 6/2022). TWAEV: 3 mg/m³ 8 hours. Form: inhalable dust CA Alberta Provincial (Canada, 6/2018). OEL: 3.5 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 7 mg/m³ 15 minutes. TWA: 3.5 mg/m³ 8 hours.
4-isocyanatosulphonyltoluene ethylbenzene	CA Quebec Provincial (Canada, 6/2022). [Isocyanate oligomers] Skin sensitizer. Inhalation sensitizer. CA Alberta Provincial (Canada, 6/2018). OEL: 543 mg/m ³ 15 minutes. OEL: 125 ppm 15 minutes. OEL: 125 ppm 15 minutes. OEL: 434 mg/m ³ 8 hours. OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2022). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). TWAEV: 20 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate n-butyl methacrylate	None. CA British Columbia Provincial (Canada, 6/2022). TWA: 50 ppm 8 hours.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	:	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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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	: Safety glasses with side shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. 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	: Use an air-fed respirator unless a site-specific assessment determines that an air- fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Restrictions on use	: Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 36.11°C (97°F)
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Evaporation rate	: 0.88 (butyl acetate = 1)

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Section 9. Physical and chemical properties

Vapor pressure	: 1.9 kPa (14 mm Hg)				
Vapor density	: Not available.				
Relative density	: 1.33				
Density(lbs / gal)	: 11.1				
Selubility/iee)	Media	Result			
Solubility(ies)	cold water	Not soluble			
Partition coefficient: n- octanol/water	: Not applicable.				
Viscosity	: Kinematic (40°C (1	104°F)): >21 mm²/s (>21 cSt)			
Volatility	: 32% (v/v), 21.923% (w/w)				
% Solid. (w/w)	: 78.077				

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: In a fire, hazardous decomposition products may be produced. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
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	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours	
	LD50 Dermal	Rabbit	>5000 mg/kg	-	
	LD50 Oral	Rat	>5000 mg/kg	-	
Nepheline syenite	LC50 Inhalation Dusts and mists	Rat	>5.07 mg/l	4 hours	
	LD50 Dermal	Rat	>5000 mg/kg	-	
	LD50 Oral	Rat	>5000 mg/kg	-	
2-methoxy-1-methylethyl acetate	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours	
	LD50 Dermal	Rabbit	>5 g/kg	-	
	LD50 Oral	Rat	6190 mg/kg	-	
	LD50 Oral	Rat		6190 mg/kg	

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Section 11. Toxicological information

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bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-		
4-piperidyl) sebacate						
carbon black	LD50 Oral	Rat	>10 g/kg	-		
4-isocyanatosulphonyltoluene	LD50 Oral	Rat	2234 mg/kg	-		
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours		
	LD50 Dermal	Rabbit	17.8 g/kg	-		
	LD50 Oral	Rat	3.5 g/kg	-		
methyl	LD50 Oral	Rat	3.125 g/kg	-		
1,2,2,6,6-pentamethyl-						
4-piperidyl sebacate						
n-butyl methacrylate	LC50 Inhalation Gas.	Rat	4910 ppm	4 hours		
	LC50 Inhalation Vapor	Rat	29000 mg/m ³	4 hours		
	LD50 Dermal	Rabbit	10.2 g/kg	-		
	LD50 Oral	Rat	16 g/kg	-		
Conclusion/Summary	: There are no data available or	n the mixture itse	lf.			
Irritation/Corrosion						
Conclusion/Summary						
Skin	: There are no data available or	n the mixture itse	lf.			
Eyes	Eyes : There are no data available on the mixture itself.					
Respiratory : There are no data available on the mixture itself.						

itself.

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

Carcinogenicity

Sensitization

Mutagenicity

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

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-
Wollastonite	-	3	-
carbon black	-	2B	-
ethylbenzene	-	2B	-
n-butyl methacrylate	-	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)

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Name	Category	Route of exposure	Target organs
n-butyl acetate 2-methoxy-1-methylethyl acetate 4-isocyanatosulphonyltoluene	Category 3 Category 3 Category 3	- - -	Narcotic effects Narcotic effects Respiratory tract irritation
n-butyl methacrylate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
n-butyl methacrylate	Category 2		-

Target organs

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

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

Eye contact	:	No known significant effects or critical hazards.
Inhalation	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	:	Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/sympto	m	<u>2</u>
Eye contact	4	No specific data.
Inhalation	:	Adverse symptoms may include the following: wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths

skeletal malformations Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations

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Section 11. Toxicological information

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: 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. Skin contact to isocyanate monomer may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Repeated exposure may lead to permanent respiratory disability. This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.
Short term exposure Potential immediate		There are no data available on the mixture itself.
effects	Ċ	
Potential delayed effects	;	There are no data available on the mixture itself.
Long term exposure Potential immediate		There are no data available on the mixture itself.
effects	1	
Potential delayed effects	:	There are no data available on the mixture itself.
Potential chronic health eff	ect	<u>s</u>
General	:	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging fertility or the unborn child.
Numerical measures of toxic	ity	

Product name AMCOAT 450H F/S 36293RESI

Section 11. Toxicological information

Acute	toxicity	estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
n-butyl acetate	10768	N/A	N/A	N/A	N/A
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	3125	N/A	N/A	N/A	N/A
4-isocyanatosulphonyltoluene	2234	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	3125	N/A	N/A	N/A	N/A
n-butyl methacrylate	16000	10200	4910	29	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-butyl acetate titanium dioxide 2-methoxy-1-methylethyl acetate	Acute LC50 18 mg/l Acute LC50 >100 mg/l Fresh water Acute LC50 134 mg/l Fresh water	Fish Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i>	96 hours 48 hours 96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28	days	-	-
2-methoxy-1-methylethyl acetate	-	83 % - Readily - 28	days	-	-
ethylbenzene	-	79 % - Readily - 10	days	-	-
Product/ingredient name	Aquatic half-life		Photolysis	S	Biodegradability
n-butyl acetate 2-methoxy-1-methylethyl acetate	-		-		Readily Readily
ethylbenzene	-		-		Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate 2-methoxy-1-methylethyl	2.3 1.2	-	Low Low
acetate ethylbenzene n-butyl methacrylate	3.6 2.99	79.43 -	Low Low

Mobility in soil

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Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable 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

Section 14. Transport information

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	TDG	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III		
Environmental hazards Marine pollutant substances	No. Not applicable.	No. Not applicable.	No. Not applicable.

Additional information

- TDG: None identified.IMDG: None identified.IATA: None identified.
- Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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Section 14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

Proof of classification
statement: Product classified as per the following sections of the Transportation of Dangerous
Goods Regulations: 2.18-2.19 (Class 3).

Section 15. Regulatory information

National Inventory List

Canada inventory (DSL)

: All components are listed or exempted.

Section 16. Other information

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

Health : 2 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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

Health : 2 Flammabili	ity : 3 Instability : 0	
Date of issue/Date of revision	4 December 2023	
Organization that prepared : the SDS	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 = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 197 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations 	

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.