SAFETY DATA SHEET



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

Date of issue/Date of revision 12 June 2024

Version 9.02

Section 1. Identification

Product name : AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Product code : 00384630

Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Professional 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 (412) 434-4515 (U.S.)

Emergency telephone : (412) 434-4515 (U.S.) **number** : (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 substance or mixture

: FLAMMABLE LIQUIDS - Category 3

Physical Hazards Not Otherwise Classified - Category 1

CARCINOGENICITY - Category 1

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

Health Hazards Not Otherwise Classified - Category 1

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Product code 00384630 Date of issue 12 June 2024

Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 2. Hazard identification

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).

GHS label elements Hazard pictograms







Signal word Hazard statements

: Danger

: Flammable liquid and vapor.

May cause drowsiness or dizziness.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May form explosive peroxides.

Prolonged or repeated contact may dry skin and cause irritation.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor.

Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Storage Disposal

: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Supplemental label elements

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

: Hazardous reactions or instability may occur under certain conditions of storage or use. 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.

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 61.9% (oral), 64.8% (dermal), 44.5% (inhalation)

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Other means of : Not available.

identification

CAS number/other identifiers

Ingredient name	Synonyms	% (w/w)	CAS number
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	10 - 30*	13983-17-0
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
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) -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	5 - 10*	108-65-6
titanium dioxide	Titanium oxide; Titanium oxide (TiO2); CI 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	1 - 5*	13463-67-7

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Section 3. Composition/information on ingredients

<u> </u>	11 00		
ethyl 3-ethoxypropionate	Propanoic acid, 3-ethoxy-, ethyl ester; Ethyl-3-ethoxy propionate; Propionic acid, 3-ethoxy-, ethyl ester; Ethyl 3-ethoxypropanoate; Alkyl (C1-2) 3-alkyl (C1-2) oxypropionate; Alkyl alkoxypropionate; 3-Ethoxypropanoic acid ethyl ester; Ethoxypropionic acid, ethyl ester; Ethyl beta-ethoxypropionate; PROPIONATE, 3-ETHOXY-, ETHYL; ETHYL ETHOXYPROPIONATE	1 - 5*	763-69-9
crystalline silica, respirable powder (<10 microns)	alpha-quartz; Silica, crystalline (quartz); Silica, Crystalline Quartz; SILICA, CRYSTALLINE, QUARTZ; Silica- Crystalline, Quartz; Silica - Crystalline Quartz; Silica-Crystalline : Quartz; Silica, crystalline - quartz	0.1 - 1*	14808-60-7
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-piperidinyl) sebacate; DECANEDIOATE, 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
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 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	0.1 - 1*	82919-37-7

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 3. Composition/information on ingredients

*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 : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eve contact : No specific data.

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 4. First-aid measures

Ingestion

: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

: Do not use water jet.

media

Specific hazards arising from the chemical

ng : 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

: Use dry chemical, CO₂, water spray (fog) or foam.

nitrogen oxides

halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

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 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 noncombustible, 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. May form explosive peroxides. Keep away from combustible materials. Avoid shock and friction. Avoid all possible sources of ignition (spark or flame). 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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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store between the following temperatures: 0 to 35°C (32 to 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
₩ollastonite	CA British Columbia Provincial (Canada, 8/2023). TWA: 1 mg/m³ 8 hours. Form: Inhalable CA Ontario Provincial (Canada, 6/2019). TWA: 1 mg/m³ 8 hours. Form: Inhalable particulate matter. CA Quebec Provincial (Canada, 7/2023). [Wollastonite] TWAEV: 5 mg/m³ 8 hours. Form: Respirable dust. TWAEV: 10 mg/m³ 8 hours. Form: Total dust.
n-butyl acetate	CA Alberta Provincial (Canada, 3/2023). Skin sensitizer. OEL: 950 mg/m³ 15 minutes. OEL: 200 ppm 15 minutes. OEL: 713 mg/m³ 8 hours. OEL: 150 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. 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, 8/2023). [butyl acetate, all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 7/2023). [butyl acetates] STEV: 150 ppm 15 minutes. TWAEV: 50 ppm 8 hours.
2-methoxy-1-methylethyl acetate	CA British Columbia Provincial (Canada, 8/2023). STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019).

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 8. Exposure controls/personal protection

TWA: 270 mg/m³ 8 hours. TWA: 50 ppm 8 hours. titanium dioxide

CA British Columbia Provincial (Canada,

8/2023).

TWA: 10 mg/m³ 8 hours. Form: Total dust TWA: 3 mg/m³ 8 hours. Form: respirable

CA Quebec Provincial (Canada, 7/2023).

TWAEV: 10 mg/m³ 8 hours. Form: Total

dust.

CA Alberta Provincial (Canada, 3/2023). Skin sensitizer.

OEL: 10 mg/m³ 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.

CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m³ 8 hours. Form: total dust

CA Ontario Provincial (Canada, 6/2019).

TWA: 300 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

CA British Columbia Provincial (Canada, 8/2023). [Silica, Crystalline - alpha quartz and Cristobalite]

TWA: 0.025 mg/m³ 8 hours. Form:

Respirable

CA Ontario Provincial (Canada, 6/2019). [Silica, Crystalline (Quartz/Tripoli)]

TWA: 0.1 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 7/2023). [Silica Crystalline -Quartz]

TWAEV: 0.1 mg/m³ 8 hours. Form:

Respirable dust.

CA Alberta Provincial (Canada, 3/2023).

OEL: 0.025 mg/m³ 8 hours. Form:

Respirable particulate

CA Saskatchewan Provincial (Canada, 7/2013).

TWA: 0.05 mg/m³ 8 hours. Form:

respirable fraction

None. None.

bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

crystalline silica, respirable powder (<10 microns)

Consult local authorities for acceptable exposure limits.

procedures

ethyl 3-ethoxypropionate

Recommended monitoring: 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.

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 8. Exposure controls/personal protection

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

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 eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection

Hand protection

: Safety glasses with side shields.

: 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

: For prolonged or repeated handling, use the following type of gloves:

Not recommended: nitrile rubber May be used: butyl 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 : Liquid.
Color : Orange.
Odor : Characteristic.
Odor threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 43.33°C (110°F)

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 9. Physical and chemical properties

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability : Not available.

Lower and upper explosive

(flammable) limits

: Not available.

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.24

Density (lbs / gal) : 10.35

Solubility(ies) : Media Result

cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

Viscosity : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Volatility : 37% (v/v), 26.872% (w/w)

% Solid. (w/w) : 73.128

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials: Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition

products

: Depending on conditions, decomposition products may include the following materials:

carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 11. Toxicological information

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	-
2-methoxy-1-methylethyl	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
acetate				
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/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	-
ethyl 3-ethoxypropionate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3200 mg/kg	-
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
methyl	LD50 Oral	Rat	3.125 g/kg	-
1,2,2,6,6-pentamethyl- 4-piperidyl sebacate				

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Sensitization

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Mutagenicity

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

Carcinogenicity

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

Classification

Product/ingredient name	OSHA	IARC	NTP
Mollastonite titanium dioxide crystalline silica, respirable powder (<10 microns)	-	3	-
	-	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)

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 11. Toxicological information

Name	3 3 3	Route of exposure	Target organs
n-butyl acetate 2-methoxy-1-methylethyl acetate	Category 3 Category 3		Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-

Target organs

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

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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 effects and also chronic effects from short and long term exposure

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 11. Toxicological information

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. 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 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

: There are no data available on the mixture itself.

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 effects

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis.

Carcinogenicity: May cause 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 toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	(vapors)	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
ethyl 3-ethoxypropionate	3200	N/A	N/A	N/A	N/A
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	3125	N/A	N/A	N/A	N/A
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	3125	N/A	N/A	N/A	N/A

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-butyl acetate 2-methoxy-1-methylethyl acetate	Acute LC50 18 mg/l Acute LC50 134 mg/l Fresh water	Fish Fish - Oncorhynchus mykiss	96 hours 96 hours
titanium dioxide ethyl 3-ethoxypropionate	Acute LC50 >100 mg/l Fresh water Acute LC50 60.9 mg/l	Daphnia - <i>Daphnia magna</i> Fish	48 hours 96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 da		-
2-methoxy-1-methylethyl acetate	-	83 % - Readily - 28 da	ays -	-
Product/ingredient name	Aquatic half-life	P	hotolysis	Biodegradability
n-butyl acetate 2-methoxy-1-methylethyl acetate	-	-		Readily Readily
ethyl 3-ethoxypropionate	-	-		Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate 2-methoxy-1-methylethyl	2.3 1.2	-	Low Low
acetate ethyl 3-ethoxypropionate	1.47	-	Low

Mobility in soil

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 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

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 13. Disposal considerations

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

	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	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

: None identified. **TDG 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.

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.

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Product name AMERSHIELD RAL 2010 SIGNAL ORANGE RESIN

Section 16. Other information

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

Health: 2 * Flammability: 2 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 Flammability: 2 Instability: 0

Date of issue/Date of 12 June 2024

revision

Organization that prepared : EHS

the SDS

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

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

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