SAFETY DATA SHEET



Date of issue/Date of revision 20 December 2023

Version 6

Section 1. Identification

Product name : STEELGUARD 2458 RAL 9002

Product code : 00320897
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.

Manufacturer : PPG Industries, Inc.

One PPG Place Pittsburgh, PA 15272 : (412) 434-4515 (U.S.)

Emergency telephone

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. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 17.3%

(oral), 24.4% (dermal), 45% (inhalation)

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Section 2. Hazards 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.

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure. (hearing organs)

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 explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling.

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. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

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

Disposal

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

Supplemental label elements

: Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

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Section 2. Hazards identification

Hazards not otherwise

: Prolonged or repeated contact may dry skin and cause irritation.

classified

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : STEELGUARD 2458 RAL 9002

Ingredient name	%	CAS number
vlene	≥20 - ≤46	1330-20-7
barium sulfate	≥20 - ≤26	7727-43-7
2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with	≥10 - ≤20	68240-06-2
ethenylbenzene and 2-ethylhexyl 2-propenoate		
titanium dioxide	≥10 - ≤20	13463-67-7
ethylbenzene	≥5.0 - ≤9.6	100-41-4
Talc , not containing asbestiform fibres	≥1.0 - ≤5.0	14807-96-6
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7
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.

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 : Causes serious eye irritation.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact: Causes skin irritation. Defatting to the skin.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

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Section 4. First aid measures

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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 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

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

Unsuitable extinguishing

: Do not use water jet.

media

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.

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Section 5. Fire-fighting measures

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds

carbonyl halides 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.

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 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.

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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 breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, : including any incompatibilities

: 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.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
x ylene	OSHA PEL (United States, 5/2018).		
	[Xylenes (o-, m-, p-isomers)]		
	TWA: 435 mg/m ³ 8 hours.		
	TWA: 100 ppm 8 hours.		
	ACGIH TLV (United States, 1/2023). [p-		
	xylene and mixtures containing p-xylene]		
	Ototoxicant.		
	TWA: 20 ppm 8 hours.		
barium sulfate	ACGIH TLV (United States, 1/2023).		
	TWA: 5 mg/m³ 8 hours. Form: Inhalable		
	fraction		
	OSHA PEL (United States, 5/2018).		

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Section 8. Exposure controls/personal protection

2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate titanium dioxide

ethylbenzene

Talc, not containing asbestiform fibres

crystalline silica, respirable powder (<10 microns)

toluene

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust

OSHA PEL (United States, 5/2018).

TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2023).

TWA: 2.5 mg/m³ 8 hours. Form: respirable

fraction, finescale particles

ACGIH TLV (United States, 1/2023).

Ototoxicant.

TWA: 20 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

ACGIH TLV (United States, 1/2023).

TWA: 2 mg/m³ 8 hours. Form: Respirable

OSHA PEL Z3 (United States).

TWA: 2 mg/m³

ACGIH TLV (United States, 1/2023). [Silica, crystalline1

TWA: 0.025 mg/m³ 8 hours. Form:

Respirable

OSHA PEL Z3 (United States, 6/2016).

TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form:

Respirable

TWA: 250 mppcf / (%SiO2+5) 8 hours. Form:

OSHA PEL (United States, 5/2018). [Silica,

crystalline]

TWA: 50 µg/m³ 8 hours. Form: Respirable

S

OSHA PEL Z2 (United States, 2/2013).

AMP: 500 ppm 10 minutes.

CEIL: 300 ppm

TWA: 200 ppm 8 hours.

ACGIH TLV (United States, 1/2023).

Ototoxicant.

TWA: 20 ppm 8 hours.

Key to abbreviations

Α = Acceptable Maximum Peak

ACGIH = American Conference of Governmental Industrial Hygienists.

С = Ceiling Limit

F = Fume

IPEL = Internal Permissible Exposure Limit

OSHA Occupational Safety and Health Administration.

R = Respirable

= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

SR = Respiratory sensitization SS Skin sensitization STFI = Short term Exposure limit values

= Potential skin absorption

TD = Total dust

TLV = Threshold Limit Value TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

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Section 8. Exposure controls/personal protection

procedures

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.

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

: Chemical splash goggles.

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

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

Not recommended: nitrile rubber

Recommended: polyvinyl alcohol (PVA), neoprene, natural rubber (latex), Viton®

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 antistatic 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. The respiratory protection shall be in accordance to 29 CFR 1910.134.

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Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : White. Odor : Aromatic. : Not available. **Odor threshold** pН : Not applicable. **Melting point** : Not available. **Boiling point** : >37.78°C (>100°F) Flash point Closed cup: 30°C (86°F)

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available. **Flammability** : Not available. : Not available.

Lower and upper explosive

(flammable) limits

Evaporation rate : Not available. Vapor pressure : Not available. Vapor density : Not available.

: 1.27 **Relative density** 10.6 Density (lbs/gal)

Media Result

Solubility(ies) cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

: Kinematic (room temperature): >400 mm²/s (>400 cSt) **Viscosity**

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

: 62% (v/v), 42.35% (w/w) Volatility

% Solid. (w/w) 57.65

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.

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Section 10. Stability and reactivity

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds carbonyl halides metal oxide/

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
x ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 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	-
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	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Conclusion/Summary Irritation/Corrosion

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

Product/ingredient name	Result	Species	Score	Exposure	Observation
kylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Conclusion/Summary

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

Conclusion/Summary

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

Conclusion/Summary

Carcinogenicity

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

Classification

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Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
kylene titanium dioxide ethylbenzene	- - -	3 2B 2B	- - -
crystalline silica, respirable powder (<10 microns) toluene	-	3	Known to be a human carcinogen.

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
toluene	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-
toluene	Category 2	-	-

Target organs

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

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

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

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Section 11. Toxicological information

: Causes serious eye irritation. **Eye contact**

: Harmful if inhaled. May cause respiratory irritation. Inhalation : Causes skin irritation. Defatting to the skin. Skin contact : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Ingestion

: Adverse symptoms may include the following: **Eye contact**

pain or irritation

watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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

: Adverse symptoms may include the following: Ingestion

> 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. 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

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Section 11. Toxicological information

Potential immediate

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

effects

effects

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

: May cause damage to organs through prolonged or repeated exposure. Prolonged or General

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.

: No known significant effects or critical hazards. **Mutagenicity** 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)	(gases)	(vapors)	Inhalation (dusts and mists) (mg/ I)
₹TEELGUARD 2458 RAL 9002	8227.1	2596.4	N/A	15.4	2.0
xylene	4300	1700	N/A	11	1.5
barium sulfate	N/A	2500	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
toluene	5580	8390	N/A	49	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Manium dioxide ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours 48 hours -

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Readily - 10 days				-
Product/ingredient name	Aquatic half-life	·	Photolysis	·	Biodeg	radability
kylene	-		-		Readily	
ethylbenzene	-		-		Readily	
toluene	-		-		Readily	

Bioaccumulative potential

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Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
toluene	2.73	8.32	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 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	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	y es.	No.	No.
Marine pollutant substances	Paraffin waxes and Hydrocarbon waxes, chloro)	Not applicable.	Not applicable.
Product RQ (lbs)	281.86	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.

Additional information

United States Pag	e: 14/17
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Product code 00320897

Product name STEELGUARD 2458 RAL 9002

14. Transport information

DOT : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of

≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation

requirements.

IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

The environmentally hazardous substance mark may appear if required by other transportation **IATA**

regulations.

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

Section 15. Regulatory information

United States

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

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A **CARCINOGENICITY - Category 1A** TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
Z-Propenoic acid, 2-methyl-,	≥20 - ≤46	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 COMBUSTIBLE DUSTS
2-methylpropyl ester, polymer		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

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Product name STEELGUARD 2458 RAL 9002

Section 15. Regulatory information

with ethenylbenzene and		(Respiratory tract irritation) - Category 3
2-ethylhexyl 2-propenoate		
titanium dioxide	≥10 - ≤20	CARCINOGENICITY - Category 2
ethylbenzene	≥5.0 - ≤9.6	FLAMMABLE LIQUIDS - Category 2
		ACUTE TOXICITY (inhalation) - Category 4
		CARCINOGENICITY - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant
Talc , not containing asbestiform	≥1.0 - ≤5.0	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
fibres		(Respiratory tract irritation) - Category 3
crystalline silica, respirable	<1.0	CARCINOGENICITY - Category 1A
powder (<10 microns)		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 1
toluene	<1.0	FLAMMABLE LIQUIDS - Category 2
		SKIN IRRITATION - Category 2
		TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant

SARA 313

Supplier notification

Chemical name

Explanation

CAS number

1330-20-7

15 - 40

100-41-4

3 - 7

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

↑ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

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 Flammability: 3 Instability: 0

United States Page: 16/17

Product code 00320897 Date of issue 20 December 2023 Version 6

Product name STEELGUARD 2458 RAL 9002

Section 16. Other information

Date of previous issue : 10/26/2022

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 = 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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