



HS232W823

Technical Data

Date: 19-FEB-2016

System	Color	Appearance	Gloss
Hybrid Powder Coating	WHITE	Smooth	85 ± 5 units on 60°

Properties

Specific Gravity	Approximately 1.67
Coverage	115 sq. ft./lb/1 mil
Hardness	2H - (ASTM D3363)
Film thickness	Recommended film thickness 1.2 to 1.6 mils
Salt Spray	1000 hrs less than 1/16" in creepage over B-1000 treated test panels (ASTM B117)
Humidity	1000 hrs no blistering over B-1000 treated test panels (ASTM D2247)
Flexibility	3/16" (ASTM D522)(Conical Mandrel)
Impact	120 in-lb direct; 120 in-lb reverse (ASTM D2794)
Cross Hatch Adhesion	5B (ASTM D3359)
Curing Instructions	10 minutes at 340°F (171°C) or 18 minutes at 320°F (160°C) or 15 minutes at 325°F (163°C) (metal temperature)
Substrate	0.032 in. CRS Pretreatment: Bonderite® 1000 tested at 2.0 mils

Features

- Contributes to LEED credits

Maximum Recommended Storage Temperature	80°F (27°C)
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For further information, please refer to application recommendations, or contact your technical service representative.

This information is given in good faith. A warranty, expressed or implied, cannot be supplied as results may vary depending on application conditions.

Protech Chemicals Ltd.
 St-Laurent, Quebec, Canada H4S 1W3
 7600 Henri-Bourassa West
 Tel: (514) 745-0200 • Fax (514) 745-5774
www.protechpowder.com



UL Recognized Component

USA Version 1.0 - Not Valid Without Verified Date

Print Date : 14-Oct-10
 Verified Date : 14-Oct-10

1. Product and Company Identification

Product name : **HS232W823**

Chemical name : Hybrid

Supplier / Manufacturer : Protech Chemicals Ltd.
 7600 Henri-Bourassa West
 Saint-Laurent, Québec
 Canada, H4S 1W3
 Tel: 514-745-0200
 Fax: 514-745-5774

Material uses : Powder Coating.

Verified by : Protech Chemical Ltd.

Anti-Poison Centre : 1-800-463-5060 / (418) 656-8090

2. Hazards Identification

OSHA status : This material is considered hazardous by OSHA Hazard Communication Standard.

Routes of entry : Dermal contact. Inhalation. Eye contact. Ingestion.

Potential Health Effects

Acute : Slightly irritating the respiratory system, skin or eyes.

Chronic : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

3. Composition / Information on Ingredients

<u>Component name</u>	<u>CAS No.</u>	<u>% by weight</u>
Calcium carbonate	1317-65-3	5 - 10
Titanium dioxide	13463-67-7	20 - 25
Crystalline silica	14808-60-7	0.1 - 1.0
Amorphous silica	7631-86-9	1 - 5
Nickel antimony titanium oxide	8007-18-9	0.1 - 1.0

4. First - Aid Measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation : Remove to fresh air, keep patient warm. Keep at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

Skin contact : Immediately remove all contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. DO NOT use solvents or thinners.

Eye contact : Remove contact lenses, keep eyelids open. Flush with plenty of clean, fresh water (10 - 15 min.). If irritation persists, seek medical attention.

Ingestion : If swallowed, do not induce vomiting. Keep at rest. Get medical attention immediately. Never give anything by mouth to an unconscious person.

5. Fire - Fighting Measures

- Flammability of the product** : Finely divided powders are potentially explosive when suspended in air. Precautions should be taken to prevent the formation of dust in concentration above flammable, explosive or occupational exposure limits. (LEL: 30g/m³)
- Extinguishing media** : Use dry chemicals, CO₂, water spray or foam. If aluminum or zinc appears in section 2, uses dry chemicals only. DO NOT use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from vicinity of the incident if there is a fire. No action should be taken without suitable training.
- Hazardous combustion products** : Decomposition products may contain:
- Carbon Oxides
 - Nitrogen Oxides
 - Sulphur Oxides
 - Metal Oxide / Oxides

6. Accidental Release Measures

- Large spill & leak** : Move containers from spill area. Prevent entry into sewers, water courses or confined areas. Avoid creating dusty conditions, use water spray to reduce dust. Eliminate all source of ignition. Use appropriate tools to put spilled solid in an identified waste disposal container. Dispose of according to local and regional authority requirements.
- Small spill & leak** : Move containers from spill area. Use appropriate tools to put spilled solid in an identified waste disposal container. Dispose of according to local and regional authority requirements.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

7. Handling and Storage

- Handling** : Use appropriate personal protective equipment (see section 8). Precautions should be taken to prevent formation of dust in concentrations above flammable, explosive or occupational exposure limits. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Preparation may charge electrostatic: always use earth leads when transferring from one container to the other. Use only with adequate ventilation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stores and processed. Wash hands and face before eating, drinking and smoking. Avoid contact with skin and eyes. Avoid inhalation of dust, particulates and spray mist arising from the application of this powder.
- Storage** : Store between 5°C and 25°C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep container tightly close and sealed until ready to use. Isolate from source of heat, sparks and open flame. Do not store in unlabeled containers. Containers which are opened must be carefully released and kept upright to prevent leakage.

8. Exposure Controls / Personal Protection

Exposure Controls

<u>Components name</u>	<u>CAS No.</u>	<u>Exposure guidelines</u>
Calcium carbonate	1317-65-3	TLV: 10 mg/m ³ PEL: 15 mg/m ³
Titanium dioxide	13463-67-7	TLV : 10 mg/m ³ PEL : 15 mg/m ³
Crystalline silica	14808-60-7	TLV : 0.05 mg/m ³ (ACGIH) PEL : 10 mg/m ³ (%SiO ₂ +2) (OSHA) TWA: 0.05 mg/m ³ (NIOSH)
Amorphous silica	7631-86-9	TWA:6 mg/m ³ (NIOSH) 10 hours TWA: 80mg/m ³ /% SiO ₂ (OSHA)
Nickel antimony titanium oxide	8007-18-9	TLV : 0.2 mg/m ³ (ACGIH) PEL : 1 mg/m ³ (OSHA)

Personal Protection

- Eye protection** : Safety eye-wear should be used when there is a likelihood of exposure.
- Skin protection** : Personal should wear protective clothing. Avoid prolonged contact with skin. Use gloves when handling powder. Barrier creams applied before powder use may help to protect the exposed areas of the skin but they should not be applied once exposure has occurred.
- Respiratory protection** : Avoid breathing dust. Mechanical exhaust is recommended. Use a NIOSH approved respirator to remove particles. Respirator selection must be based on known or anticipated exposure levels.

Hygiene measures

: Use good personal hygiene practices. Wash hands before eating, drinking and using the lavatory and at the end of the working period. Wash contaminated clothing before reuse. Contaminated clothing should be washed independently of all other types of clothing.

**9. Physical and Chemical Properties**

Physical state	: Solid Powder
Flash point	: Closed cup > 300°C
Colour	: White
Relative density	: 1.2 - 1.9 g/cm³
Solubility in water	: Insoluble in cold or hot water.
pH	: Neutral
VOC	: 0 (g/l)

10. Stability and Reactivity

Stability	: The product is stable under recommended storage and handling conditions.
Hazardous decomposition products	: When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. Toxicological Information**Acute Toxicity**

<u>Components name</u>	<u>Result LD50/TD50</u>
Calcium carbonate	LD50/oral/rat : 2000-6450 mg/kg
Titanium dioxide	LD50/oral/rat > 7500 mg/kg LD50/dermal/rabbit > 10000 mg/kg
Crystalline silica	LD50/oral/rat > 500 mg/kg
Nickel antimony titanium oxide	LD50/oral/rat > 10000mg/kg

Chronic toxicity : Contain material which may cause target organ damage: upper respiratory tract, lungs, skin or eye.

Carcinogenicity Classification

<u>Components name</u>	<u>ACGIH</u>	<u>IARC</u>	<u>EPA</u>	<u>NIOSH</u>	<u>NTP</u>	<u>OSHA</u>
Titanium dioxide	A4	2B				
Crystalline silica	A2	1		CA	K	
Amorphous silica	3					
Nickel antimony titanium oxide	A5	2B			R	

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

12. Ecological Information

Aquatic ecotoxicity	: Not available
Biodegradability	: Not available.

13. Disposal Considerations

Waste disposal : Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT : Not a DOT controlled material.

14-Oct-10

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