Material Safety Data Sheet

Date of issue 28 September 2015
Version 4

1 . Product and company identification

Product name : Chemical Vapor Deposition (CVD) and Spray Pyrolysis Coated Float Glass

Code : 01049

Synonym : This MSDS covers all PPG CVD coated glass including, but not limited to: IntelliGlaze, AquaGlaze coated glass substrates, Sungate® 500, Sungate® 600, Sunclean®, Solarcool® coated glass substrates, Vistacool™ coated glass substrates, Solar TCO, Solarphire™ TCO.

Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)

Technical Phone Number : 1-412-820-8500 (Flat Glass/Trade)

2 . Hazards identification

Emergency overview : This product is considered an article. The end use is dependent upon the manufactured shape and design, and this article will not pose an exposure hazard under normal conditions.

Sanding and grinding dusts may be harmful if inhaled.and May be irritating to eyes and respiratory system.

Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Inhalation : (Sanding and grinding dusts) May cause slight transient irritation.

Ingestion : Route of exposure not applicable.

Skin : (Sanding and grinding dusts) No significant irritation expected other than possible mechanical irritation.

Eyes : (Sanding and grinding dusts) No significant irritation expected other than possible mechanical irritation.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS).

See toxicological information (Section 11)

3 . Composition/information on ingredients

Name	CAS number	% (w/w)
glass, oxide, chemicals	65997-17-3	60 - 100

Composition consisting primarily of oxides of silicon with lesser quantities of other selected oxides common to soda-lime glasses, fused into an amorphous vitreous state.

Note: Glass sheets are typically stacked for shipment and may be separated with less than 1 weight percent of powdered interleaving material consisting of organic acid coated polymeric beads. Exposure to these polymeric beads is not expected to be a concern. Glass surface may also be coated with a solution of a mild organic acid. The dried residue on the glass is less than 1% by weight. In handling the glass, exposure to the mild organic acid is not expected to be a concern. The only potential impact may be on the pH of the waste water effluent after glass washing to remove the residue and interleaving.

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.

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 Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact : (Sanding and grinding dusts) In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Check for and remove any contact lenses.

Skin contact : None known.

Inhalation : None known.

Ingestion : Not a likely route of exposure.

Notes to physician : Treat symptomatically.

5 . Fire-fighting measures

Flammability of the product : No specific fire or explosion hazard.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : 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.

Hazardous combustion products : No specific data.

Special protective equipment for fire-fighters : No special protection is required.

6 . Accidental release measures

Personal precautions : No special protection is required.

Environmental precautions : No specific hazard.

Large spill : Vacuum or sweep up material and place in a designated, labeled waste container.

Small spill : Vacuum or sweep up material and place in a designated, labeled waste container.

Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Take care with items that are sharp or heavy.
Any glass can have sharp edges, particularly at a cut or fractured edge. Normal strength glass, also known as annealed or float glass, is known to fracture into large sections with sharp edges. Chemically strengthened or chemically tempered glass and thermally heat-strengthened glass will tend to fracture much the same as normal strength annealed glass, and are not considered safety glazing products. Thermally tempered glass (commonly known as fully tempered glass or safety glazing) will fracture into many smaller pieces still capable of cutting skin, but typically not as severely as would larger fragments from normal strength annealed glass. These safety concerns should be addressed with proper personal protective equipment to protect oneself against any sharp edges, including those formed by accidental glass fracture during handling. Sanding (a.k.a. seaming or edging) any sharp glass edges to produce rounded edges also reduces the hazards with being cut by sharp edges.

Storage : Store in a dry place away from excessive moisture and exhaust fumes from fork trucks or other such equipment. Support glass in cases on both sides when stored vertically. Glass packs and open cases should be stored at a 5° lean angle to prevent glass from falling forward.

8 . Exposure controls/personal protection

Name	Result	ACGIH	Ontario	Mexico	PPG
Sanding and grinding dusts	TWA	10 MG/M3 TD 3 MG/M3 R 1 f/cc 5 mg/m³ (Inhalable) 1 f/cc R 5 mg/m³	1 f/cc R 5 mg/m³ 10 mg/m³	Not established	Not established

Key to abbreviations

A	=	Acceptable Maximum Peak	SR	=	Respiratory sensitization
ACGIH	=	American Conference of Governmental Industrial Hygienists.	SS	=	Skin sensitization
C	=	Ceiling Limit	STEL	=	Short term Exposure limit values
F	=	Fume	TD	=	Total dust
IPEL	=	Internal Permissible Exposure Limit	TLV	=	Threshold Limit Value
R	=	Respirable	TWA	=	Time Weighted Average
S	=	Potential skin absorption			

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : Not applicable

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Rubber dipped anti-lacerative gloves are recommended.

8 . Exposure controls/personal protection

Respiratory : (Sanding and grinding dusts) If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. 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.

Skin : 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.

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.

Additional information : Glass Handler's cuffs, sleeves, chaps, neck protection and aprons. Also, hard hat when glass is lifted above the shoulder. Steel-toed safety shoes, with metatarsal protection, are recommended.

9 . Physical and chemical properties

Physical state : Solid.

Flash point : Closed cup: Not applicable. [Product does not sustain combustion.]

Auto-ignition temperature : Not applicable

Color : tinted

Odor : Odorless.

pH : Not applicable.

Boiling/condensation point : Not applicable.

Melting/freezing point : 1300 °F (704°C) (softening point)

Specific gravity : 2.45

Density (lbs / gal) : 20.45

Vapor pressure : Not applicable.

Vapor density : Not applicable.

Volatility : 0% (v/v), 0% (w/w)

Evaporation rate : Not applicable.

Viscosity : Not applicable.

Partition coefficient: n-octanol/water : Not applicable.

% Solid. (w/w) : 100

10 . Stability and reactivity

Stability : The product is stable.

Conditions to avoid : No specific data.

Materials to avoid : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions : Not applicable.

11 . Toxicological information

Acute toxicity

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Skin : Not available.
Eyes : Not available.
Respiratory : Not available.

Sensitization

Skin : Not available.
Respiratory : Not available.

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes. (Sanding and grinding dusts)

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	NTP
Sanding and grinding dusts	A4	3	-

Carcinogen Classification code:
ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
Not listed or regulated as a carcinogen: -

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

13 . Disposal considerations

Waste disposal : 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.

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

	TDG	Mexico	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

14. Transport information

Additional information

TDG : None identified.
Mexico : None identified.
IMDG : None identified.

Special precautions for user : Not applicable.

15 . Regulatory information

Canada inventory (DSL) : All components are listed or exempted.

Canada

WHMIS (Canada) : None identified.

Mexico

Classification

Flammability : 0 **Health** : 0 **Reactivity** : 0

16 . Other information

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

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

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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

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

Other information : the PPG logo is a registered trademark of PPG Industries Ohio, Inc.

Date of previous issue : **6/5/2015**

Organization that prepared the MSDS : EHS

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.