SAFETY DATA SHEET

Date of issue: 27 April 2016 **Date of revision:** October 2025 **Version:** 3

Section 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : Magnetic Sputter/Vacuum Deposition (MSVD) Coated Float Glass

Product code : 01050

EC number : Not available

CAS number : Not available

Other means of identification : This SDS covers all Vitro MSVD Low-E coated glass products including, but not limited to: *Sungate® 400, Sungate® 400VT, Sungate® 460, Sungate® 60VT, Solarban® z50, Solarban® z50VT, Solarban® 60, Solarban® 60VTII, Solarban® 65VT, Solarban® R67, Solarban® R67VT, Solarban® 70, Solarban® 70VT, Solarban® 70XLVT,Solarban® 72VT, Solarban® z75, Solarban® z75VT, Solarban® R77VT, Solarban® 90,Solarban® 90VT, Solarban® R100VT, Solarphire™ HVM*

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

Identified uses	
Construction materials (building materials) - Other construction materials	
Uses advised against	**Reason**
None identified.	

Product use : Glass

1.3 Details of the supplier of the safety data sheet

Vitro Flat Glass LLC
400 Guys Run Road
Cheswick, PA 15024 USA

- Tel : +1-412-820-8500 (Flat Glass/Trade)

Supplier Telephone number :+1-412-820-8500

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: : 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 this article can generate nuisance dust particles.
Sanding and grinding dusts May be irritating to eyes and respiratory system.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards

Precautionary statements

Prevention : Not applicable

Response : Not applicable

Storage : Not applicable

Disposal : Not applicable

Supplemental label elements : Safety data sheet available on request.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable

Tactile warning of danger : Not applicable

2.3 Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII : Not available

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : Not available

Other hazards which do not result in classification : None known

Section 3: Composition/information on ingredients

3.1 Substances : 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 this article can generate nuisance dust particles.
Sanding and grinding dusts May be irritating to eyes and respiratory system.

Product/ingredient name	Identifiers	% by weight	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
glass, oxide, chemicals	EC: 266-046-0 CAS: 65997-17-3	50 - 100	Not classified.	[A]

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 polymeric beads. Exposure to these polymeric beads is not expected to be a concern. MSVD glass may contain TPO (Temporary Protective Overcoat) made of polyvinyl alcohol. TPO is applied only to VT product versions. Exposure to polyvinyl alcohol is not expected to be a concern.

These coated glass products contain less than 0.1% of the following intentionally added metals (specific metals depend on product): silver, tin, zinc, nickel, chromium, aluminum, titanium and/or iron. Activities that generate dust from these coated glass products should be evaluated to determine if any regulatory exposure limits are exceeded. If exposure limits are exceeded for dust/metal, appropriate engineering controls (e.g., ventilation/HEPA filters) and/or personal protective equipment (e.g., respirators) should be provided.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section. Type

[A] Constituent
[B] Impurity
[C] Stabilising additive

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

SUB codes represent substances without registered CAS Numbers.

Section 4: First aid measures

4.1 Description of first aid measures

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

Inhalation : None known

Skin contact : None known

Ingestion : Not a likely route of exposure

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

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

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

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

Ingestion : Not a likely route of exposure.

Over-exposure signs/symptoms

Eye Contact : No specific data

Inhalation : No specific data

Skin contact : No specific data

Ingestion : No specific data

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically.

Specific treatments : No specific treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous combustion products : No specific data.

5.3 Advice for firefighters

Special precautions 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.

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

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No special protection is required.

For emergency responders : No special protection is required.

6.2 Environmental precautions : No specific hazard

6.3 Methods and material for containment and cleaning up

Small Spill Vacuum or sweep up material and place in a designated, labelled waste container

Large Spill Vacuum or sweep up material and place in a designated, labelled waste container

6.4 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.

Section 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : 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. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. 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 will tend to fracture much the same as normal strength glass. Thermally tempered glass (commonly found in automotive side and rear windows) will fracture into a large number of very small pieces capable of cutting skin, but typically not as deep as would a large sharp fragment of normal strength 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

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.

7.2 Conditions for safe Storage, including any incompatibilities

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.

7.3 Specific end use(s)

Recommendations : Building and construction work

Industrial sector specific solutions : Industrial and Professional use

Section 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Sanding and grinding dusts	**ACGIH TLV (United States).** TWA: 5 mg/m³, (Inhalable) TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total dust **ACGIH TLV (United States, 3/2015).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of
exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs : Not Available

PNECs : Not Available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If user operations generate dust, fumes, gas, vapour 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. When grinding for removal of the MSVD coating, inhalation of silver containing coating dust should be prevented by using a localized exhaust ventilation system to remove the silver particulate being removed. The ventilation system should be equipped with a HEPA (High Efficiency Particulate Air) filter with efficiency greater than 99.9%.

Individual protection measures

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

Eye/face protection : Safety glasses with side shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Gloves : Rubber dipped anti-lacerative gloves are recommended.

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.

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.

Environmental exposure controls : Not applicable

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid

Colour : Clear/Colourless to tinted

Odour : Odourless.

Odour threshold : Not applicable

pH : Not applicable

Melting point/freezing point : Not available

Initial boiling point and boiling range : Not available

Flash point	:	Closed cup: Not applicable. [Product does not sustain combustion.]
Evaporation rate	:	Not applicable
Material supports combustion	:	No
Flammability (solid, gas)	:	Not applicable
Upper/lower flammability or explosive limits	:	Not applicable
Relative density	:	2.45
Solubility(ies)	:	Not available
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not applicable
Viscosity	:	Kinematic (40°C): Not applicable
Explosive properties	:	Not available
Oxidising properties	:	Not available

9.2 Other information

No additional information.

Section 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	The product is stable.
10.3 Possibility of hazardous reactions	:	Not applicable
10.4 Conditions to avoid	:	No specific data Refer to protective measures listed in sections 7 and 8.
10.5 In compatible materials	:	No specific data
10.6 Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity : Not applicable.

Conclusion/Summary

Irritation/Corrosion : Not available.

Conclusion/Summary

Sensitization : Not available.

Conclusion/Summary

Carcinogenicity : Not available.

Conclusion/Summary

Reproductive toxicity : Not available.

Conclusion/Summary

Teratogenicity : Not available.

Conclusion/Summary

Specific target organ toxicity (single exposure) : Not available.

Specific target organ toxicity (repeated exposure) : Not available.

Aspiration hazard : Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

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

Ingestion : Not a likely route of exposure.

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

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

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : No specific data.

Skin contact : No specific data.

Eye contact : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects : Not available

Conclusion/Summary : Not applicable

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Section 12: Ecological information

12.1 Toxicity
Conclusion/Summary : Not available

12.2 Persistence and degradability
Conclusion/Summary : Not available.

12.3 Bioaccumulative potential : Not available.

12.4 Mobility in soil
Soil/water partition coefficient (KOC) : Not available.

Mobility Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not available.
P: Not available. B: Not available. T: Not available.

vPvB : Not available.
vP: Not available. vB: Not available.

12.6 Other adverse effects : No known significant effects or critical hazards.

Section 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Glass products with MSVD coatings and silver containing dusts generated during grinding removal of the MSVD coating may be recycled. The disposal requirements for waste dust should be based upon testing conducted in accordance with federal, provincial, state, and local requirements.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
10 11 00	wastes from manufacture of glass and glass products

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
Container	15 01 01	paper and cardboard packaging

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID : None identified.
AND : None identified.
IMDG : None identified.
IATA : None identified.

Special precautions for user : -

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH) Annex II, including all amendments up to Commission Regulation (EU) No. 2025/1090

Annex XIV - List of substances subject to authorization Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Seveso Directive : This product is not controlled under the Seveso Directive.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

Section 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements : Not applicable.

Full text of classifications [CLP/GHS] : Not applicable.

History

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Prepared by	:	Vitro Architectural Environmental Manager
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