

# PPG HI-SIL<sup>®</sup>, LO-VEL<sup>®</sup> and SILENE<sup>™</sup>

## Precipitated Silicas



### GLOBAL PRODUCT SAFETY AND REGULATORY INFORMATION SHEET

Untreated PPG HI-SIL<sup>®</sup>, LO-VEL<sup>®</sup> and SILENE<sup>™</sup> silica products are suitable for general use and indirect Food Contact applications as specified in the applicable USA and European regulations. These products are not recommended for Food/Feed applications. For Food/Feed applications, please see the PPG FLO-GARD<sup>™</sup> Silica Global Product Safety and Regulatory Information Sheet.

#### General Information

Name: Synthetic amorphous silica

Description: Silica products are synthetic, hydrated amorphous silicas, covered by CAS REGISTRY NUMBER: 112926-00-8 (CAS# 7631-86-9 for TSCA inventory purposes) – Synthetic amorphous precipitated silica (polysilicic acid), EC Number 231-545-4.

Composition: Chemical composition information is available in the product safety data sheet (SDS).

Contact Information: For specific inquiries, please contact your PPG Sales, Customer Service or Technical Service Representative at:

#### United States

Customer Service: 1-800-243-6745

Technical Service: 1-800-764-7369

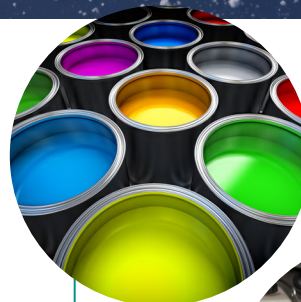
E-mail: [silicacustserv@ppg.com](mailto:silicacustserv@ppg.com)

#### Europe

Customer Service: +31-596-676710

Technical Service: +31-596-676710

E-mail: [csdelfzijl@ppg.com](mailto:csdelfzijl@ppg.com)



**Product Category**

The following PPG HI-SIL<sup>®</sup>, LO-VEL<sup>®</sup> and SILENE<sup>™</sup> silica products are suitable for general use and indirect Food Contact applications as specified in the applicable USA and European regulations. These products are not recommended for use as Food/Feed additives.

<i>Hi-Sil 132</i>	<i>Hi-Sil 315-D</i>	<i>Hi-Sil HDP-320G</i>	<i>Hi-Sil WB2085-D</i>
<i>Hi-Sil 134G</i>	<i>Hi-Sil 315G-D</i>	<i>Hi-Sil LPC</i>	<i>Lo-Vel 27</i>
<i>Hi-Sil 135</i>	<i>Hi-Sil 532EP</i>	<i>Hi-Sil SAC</i>	<i>Lo-Vel 29</i>
<i>Hi-Sil 190G</i>	<i>Hi-Sil 900</i>	<i>Hi-Sil SBG</i>	<i>Lo-Vel 39A</i>
<i>Hi-Sil 210</i>	<i>Hi-Sil 915</i>	<i>Hi-Sil SC-72</i>	<i>Lo-Vel 275</i>
<i>Hi-Sil 213</i>	<i>Hi-Sil ABS</i>	<i>Hi-Sil T-152</i>	<i>Lo-Vel 2000</i>
<i>Hi-Sil 233</i>	<i>Hi-Sil ABS-D</i>	<i>Hi-Sil SP</i>	<i>Lo-Vel 2003</i>
<i>Hi-Sil 233B</i>	<i>Hi-Sil EZ90-D</i>	<i>Hi-Sil T-600</i>	<i>Lo-Vel 6000</i>
<i>Hi-Sil 233-D</i>	<i>Hi-Sil EZ90G-D</i>	<i>Hi-Sil T-690</i>	<i>Lo-Vel 6200</i>
<i>Hi-Sil 243LD</i>	<i>Hi-Sil EZ120G-D</i>	<i>Hi-Sil T-700</i>	<i>Lo-Vel HSF</i>
<i>Hi-Sil 250</i>	<i>Hi-Sil EZ160G</i>	<i>Hi-Sil T-800</i>	<i>Silene 732D</i>
<i>Hi-Sil 255C-D</i>	<i>Hi-Sil EZ160G-D</i>	<i>Hi-Sil WB10</i>	
<i>Hi-Sil 255CG-D</i>	<i>Hi-Sil EZ200G</i>	<i>Hi-Sil WB10-D</i>	
<i>Hi-Sil 255G</i>	<i>Hi-Sil EZ200G-D</i>	<i>Hi-Sil WB2085</i>	

#### Storage/Shelf Life

Handling and proper storage is essential to the performance of the product. Silica is hygroscopic and may pick up moisture when stored for a long period of time, even in the best of conditions. PPG recommends that silica products be stored under dry, clean conditions and protected against exposure to other substances. Since this product may pick up moisture PPG also recommends that products that are stored more than one year, from date of manufacture, be re-tested for moisture content. There is no shelf life limit when stretch-wrapped palletized units or bags are kept under the above stated conditions except for HI-SIL<sup>®</sup> EZ200G and *Hi-Sil* EZ200G-D for which the shelf life is 6 months.

#### Global Regulatory Information

##### CHEMICAL INVENTORY STATUS:

- United States inventory (TSCA 8b) : All components are listed or exempted.
- Australia inventory (AICS): All components are listed or exempted.
- Canada inventory (DSL): All components are listed or exempted.
- China inventory (IECSC): All components are listed or exempted.
- Japan inventory (ENCS): All components are listed or exempted.
- Korea inventory (KECI): All components are listed or exempted.
- New Zealand (NZIoC): All components are listed or exempted.
- Philippines inventory (PICCS): All components are listed or exempted.
- EU REACH registration: PPG has registered the Synthetic Amorphous Silica (SAS) substance (CAS Registry Numbers 7631-86-9 and 112926-00-8; EC-No. 231-545-4) with the European Chemicals Agency in Helsinki (ECHA) in compliance with European "Registration, Evaluation and Authorisation of Chemicals" (REACH) Regulation (1907/2006/EC). Our registration supported the manufacture of this substance at PPG's factory in Delfzijl, the Netherlands, and through PPG's appointed Only Representative, PPG Central (UK) Ltd., our manufacturing facilities located outside the EU.
- Taiwan inventory (TCSI): All components are listed or exempted.

#### United States of America (USA) Regulatory Information

##### FDA STATUS

See specific citations for possible limitations on use:

For indirect food contact uses, silicon dioxide is cleared or permitted under:

- §175.105 (Adhesives)
- §177.2420 (Cross-Linked Polyester Resin)
- §177.2600 (Rubber Articles)
- §182.90 (Paper and Paperboard)
- §178.3297 (Indirect Food Additives, Adjuvants, production aids, and sanitizers subpart D- Certain Adjuvants and Production Aids for indirect food contact uses)
- §176.170 (Components of paper and paperboard in contact with aqueous and fatty foods)
- §176.180 (Components of paper and paperboard in contact with dry food)

Silicon dioxide is exempted from the tolerance requirements under:

- §182.99 (Adjuvants for Pesticide Chemicals) and is specifically listed as an acceptable inert in pesticide formulations under EPA 40 CFR §180.950 as "silica gel, precipitated, crystalline-free, CAS No. 112926-00-8"

The references identified above identify the specific clearances in FDA's regulations for the use of silicon dioxide in food contact applications. Other uses of silicon dioxide in FDA regulated applications also may be acceptable after a review of the proposed use to determine the regulatory status of PPG's product in applications not covered by the regulations identified above, inquiries must be made in writing to [silicacustserv@ppg.com](mailto:silicacustserv@ppg.com). To avoid delays in providing a response, please be as specific as possible in your inquiry, and provide the complete name of the PPG product that is subject of your request.

## FACILITY REGISTRATIONS

### GMP Practices

GMP written procedures include the following elements:

- Regulatory and Internal Inspections;
- Internal Audit Checklist;
- Critical Control Points Monitoring (including HACCP);
- Finished Product Analysis;
- Sanitary Operations for Housekeeping for Contractors, Maintenance, and Laborers;
- Lubricant/Chemical Storage & Lubricant Equipment List;
- Detailed Cleaning Procedures;
- Temporary Eating and Smoking Areas;
- Sanitary Facilities and Controls (including Pest Controls)

For silica products used in food contact applications, PPG's GMPs meet the requirements of FDA's regulations in 21 C.F.R. § 174.5 and, in the EU regulation (EC) 2023/2006.

- PPG security professionals develop, implement and audit the corporation's global security policies. In compliance with PPG Corporate Policy, each PPG facility has established procedures to control access of employees, contractors, customers, other visitors and vehicles to the site while restricting access of unauthorized personnel. These procedures help to assure PPG's ability to control who and what enters PPG facilities and have a record at any given time of who is on the premises.
  - In addition, PPG conducts background checks on all of its employees and provides guidelines for contractors to conduct background checks on all of its employees who will be assigned to PPG facilities. Initial and random drug screening of employees also helps to protect the integrity of PPG products.
  - PPG monitors local and specific threats via communication with governmental organizations such as the FBI and Coast Guard and Industry groups such as the Overseas Advisory Council (OSAC) and the American Chemistry Council (ACC). PPG maintains relationships with government law enforcement agencies, wherever it does business, to cooperate with them and to share information that best serves all constituents.



## REGULATORY AND SPECIFIC PRODUCT INFORMATION

- **California Proposition 65**  
If applicable, the warning statements appear in Section 15, "REGULATORY INFORMATION" on the product U. S. Safety Data Sheet (SDS). Additionally, the SDS provides information to guide users to minimize exposure.
- **Consumer Product Safety Improvement Act ("CPSIA"), 15 U.S.C. §2087**  
Lead and Phthalates are not intentionally added to PPG's silica products nor are they expected to be present. Based on our knowledge of the manufacture and handling of the silica products, they would not contain lead in quantities greater than 0.009% or di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), or di-n-octyl phthalate (DnOP) in quantities greater than 0.1%.
- **Toxics in Packaging Clearing House (TPCH) (formerly CONEG Regulation / Heavy Materials in Packaging)**  
Lead, cadmium, mercury, and hexavalent chromium are not intentionally added to these products and the sum of the incidental concentration levels of these metals does not exceed 100 parts per million (ppm) by weight.
- **Toxic Pollutants/Priority Pollutants**  
These products do not contain toxic pollutants / priority pollutants as listed in 40 CFR 401.15.
- **RCRA Hazardous Waste Chemical**  
To our knowledge, these products, if discarded or spilled, would not be a regulated hazardous waste under 40 CFR 261, but we have not tested them by the Toxicity Characteristic Leaching Procedure. Consult Product Safety Data Sheet (SDS) for additional information.
- **VOC Information**  
These products do not contain constituents that qualify as volatile organic compounds based on the definition in 40 CFR 51.100.
- **HAP Information**  
These products do not contain hazardous air pollutants (HAPs) as listed in the Clean Air Act Amendments of 1990, 42 USC 7412(b).
- **Ozone-Depleting Chemicals**  
These products do not contain ozone-depleting chemicals as listed in 40 CFR 82, Subpart A, Appendix F.
- **TSCA**  
The constituents of these products are not currently subject to any chemical-specific rules or orders under TSCA Sections 4, 5, 6, 7, 8, and are not currently subject to TSCA section 12(b) export notification requirements.

## European Union (EU) Regulatory Information

### FOOD CONTACT

These products (PPG HI-SIL<sup>®</sup>, LO-VEL<sup>®</sup> and SILENE<sup>™</sup>) are not recommended for Food/Feed applications. For Food/Feed applications, please see the PPG FLO-GARD<sup>™</sup> Silica Global Product Safety and Regulatory Information Sheet. EC 1935/2004 is the Framework Regulation Food Contact Materials have to comply with in Europe.

Synthetic Amorphous Silica is included in Annex I (Union list of authorised monomers, other starting substances, macromolecules obtained from microbial fermentation, additives and polymer production aids) of EU 10/2011 Amendments 2015/174, 2016/1416 and 2017/752. PPG's silica products meet the particle size limitation of "primary particles of 1-100 nm which are aggregated to a size of 0,1 – 1 µm which may form agglomerates within the size distribution of 0,3 µm to the mm size." Through a series of analytical experimentation and theoretical considerations, it can be unambiguously concluded that, once dispersed in a polymeric matrix, precipitated hydrophilic synthetic amorphous silica particles do not leach out when in contact with food, EU 10/2011 does not establish a specific migration limit (SML) for silica; however, based on the fact that it would not migrate from the polymeric matrix, silica would not exceed the implicit SML of 60 mg/kg for finished products as written in Article 11. Furthermore, the inclusion of hydrophilic synthetic amorphous silica in plastics does not induce the formation of non-intentionally added substances (NIAS). Therefore, we can conclude that our silica products are compliant with EU 10/2011, last amended by EU 2018/213.

## REGULATORY AND SPECIFIC PRODUCT INFORMATION

- **RoHS/WEEE**

These products have been reviewed with regard to the EU Directive 2011/65/EC “Restriction on the Use of Certain Hazardous Substances” (RoHS). Based on our knowledge of these products and the information on the raw material suppliers’ safety data sheets, these products do not contain cadmium, hexavalent chromium, lead, mercury, polybrominated biphenyls (PBBs) or polybrominated diphenyl ethers (PBDEs) at levels greater than the tolerated maximum concentration values established by the EU Commission Decision 2011/65/EC.

- **End of Life Vehicle (ELV)**

These products have been reviewed with regard to the EU Directive 2000/53/EC. Based on our knowledge of these products and the information on the raw material suppliers’ safety data sheets, these products do not contain intentionally added cadmium, hexavalent chromium, lead and mercury.

- **Heavy Metals in Packaging and Packaging Waste**

These products have been reviewed with regard to the EU Directive 94/62/EC. Based on our knowledge of these products and the information on the raw material suppliers’ safety data sheets, these products do not contain intentionally added lead, cadmium, mercury, and hexavalent chromium and the incidental concentration level of each of these metals does not exceed 100 parts per million (ppm) by weight.

- **Perfluorooctane sulfonates (PFOS)**

These products have been reviewed with regard to EU Directive 76/769/EEC as amended by EU Directive 2006/122/EC and based on our knowledge of these products and the information on the raw material suppliers’ safety data sheets; these products do not contain Perfluorooctane sulfonates (PFOS) at levels equal or greater than 0,005% by mass.

- **Phthalates Absence Directive (2005/84/CE)**

These products have been reviewed with regard to EU Directive (2005/84/EC) and based on our current knowledge of these products and the information (such as safety data sheets [SDSs]) provided to PPG by its raw material suppliers, bis (2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), di-“isononyl” phthalate (DINP), di-“isodecyl” phthalate (DIDP), and di-n-octyl phthalate (DNOP) are not intentionally added to these products and we would not expect these substances to be present in the products.

- **Substances of Very High Concern (SVHC)**

We routinely review these products with regard to the substances included in the most recent SVHC candidate list and based on our current knowledge of these products and the information (such as safety data sheets [SDSs]) provided to PPG by its raw material suppliers, these products do not contain any of the substances included in the Candidate List at levels greater than the tolerated maximum concentration values established by the EU Regulation 1907/2006/EC, or above 0.1%, whichever is the lower. If PPG finds substances have been added to this list, notification will be sent to our customers.

- **VOC Information**

These products do not contain constituents that qualify as volatile organic compounds based on the definitions in EU Directives 1999/13/EC and 2004/42/EC.

- **Swiss Ordinance (RS 817.023.21)**

Silica products are listed in Annex 6 of the Ordinance of the FDHA on articles and materials of 23 November 2005 of the Swiss Ordinance RS 817.023.21.

## Certifications and Listings

### CERTIFICATIONS

- **Quality Management System**

We maintain certification under ISO 9001 (Det Norske Veritas is our registrar).

- **NAFTA Status**

NAFTA status and NAFTA Certificates of Origin, where applicable, are available by request to fax number +1 412-434-3548 or email to [classification@ppg.com](mailto:classification@ppg.com).

### LISTINGS

- **Genetically Modified Organisms (GMOs)**

These products are not manufactured with and do not contain genetically modified organisms.

- **Bovine Spongiform Encephalopathy**

These products are not of animal origin, and, to the best of our knowledge, do not contribute to Transmissible Spongiform Encephalopathy (TSE) / Bovine Spongiform Encephalopathy (BSE).

- **Source**

These products are derived from mineral and synthetic sources and have not been derived from a plant, animal, petroleum, or fermentation source.

- **Natural Latex Rubber**

These products are not manufactured with and do not contain natural latex rubber, a material defined in 21 CFR 801.437 (b)(1).

- **Processing / Manufacturing**

No post treatment is applied to these products. Sewage sludge, ionizing radiation, and pesticides are not used in the manufacturing process.

- **Bisphenol A**

Based on our current knowledge of these products and the information (such as safety data sheets [SDSs]) provided to PPG by its raw material suppliers, Bisphenol A is not intentionally added to these products and we would not expect Bisphenol A to be present in these products.

- **Melamine**

Based on our current knowledge of these products and the information (such as safety data sheets [SDSs]) provided to PPG by its raw material suppliers, Melamine is not intentionally added to these products and we would not expect Melamine to be present in these products.

- **Partially Hydrogenated Oils (PHO)**

Partially Hydrogenated Oils (PHO) are not intentionally added to this product and we would not expect these substances to be present in this product.

## FOOD ALLERGENS

- **Food Allergen Labeling and Consumer Protection Act of 2004** (Public Law 108-282, Title II)  
Milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, gluten and soybeans are not intentionally added to the products and we would not expect them to be present in these products.
- **ALBA list and Allergens (as identified by the U.S. Food and Drug Administration in Compliance Policy Guide), Sec. 555.250 Statement of Policy for Labeling and Preventing Cross-contact of Common Food Allergens, Issued: 04/19/2001**  
Allergens listed in this policy are not intentionally added to the products and we would not expect them to be present in these products.
- **EU Directive 2006/142/EC (amending Annex IIIa of Directive 2000/13/EC)**  
Allergens listed in EU Directive 2006/142/EC are not intentionally added to the products and we would not expect them to be present in these products.
- **CODEX Labeling of Prepackaged Foods (CODEX STAN 1-1985)**  
Cereals containing gluten; i.e., wheat, rye, barley, oats, spelt or their hybridized strains and products of these; Crustacea and products of these; Eggs and egg products; Fish and fish products; Peanuts, soy beans and products of these; Milk and milk products (lactose included); Tree nuts and nut products; and Sulphite in concentrations of 10 mg/kg or more are not intentionally added to the products and we would not expect them to be present in these products.
- **Australia New Zealand Food Standards Code (Labeling)**  
Peanuts, tree nuts, soy, milk, egg, cereals, seafood, fish sesame or derivatives and sulphites (in concentration  $\geq 10$  ppm) are not intentionally added to the products and we would not expect them to be present in these products.
- **Canada Gazette, PART II (CGII) Food Allergen Labeling Requirements - August 4, 2012**  
Eggs, milk, mustard, peanuts, seafood (fish, crustaceans, shellfish), sesame, soy, sulphites, tree nuts, and wheat are not intentionally added to the products and we would not expect them to be present in these products.

## Corporate Responsibility / Policies

### CORPORATE MEMBERSHIPS

As a member of the American Chemistry Council (ACC) PPG is certified under the Responsible Care Management System under the Responsible Care<sup>®</sup> initiative, an industry commitment to improve environmental, health, safety and security performance. Please consult the ACC ([www.americanchemistry.com](http://www.americanchemistry.com)), and PPG's Corporate Environment, Health, and Safety (<http://sustainability.ppg.com/Home.aspx>) for information regarding the following:

- Measuring and publically reporting performance
- Implementing the Responsible Care Security Code
- Applying an EHS Management System to achieve and verify results
- Obtaining independent certification that the management system is in place and functioning appropriately





#### GLOBAL HEADQUARTERS

440 College Park Drive  
Monroeville, PA 15146 USA

#### MANUFACTURING FACILITIES

PPG Lake Charles Plant  
3150 Pete Manena Road  
Westlake, LA 70669

PPG Barberton Plant  
4829 Fairland Road  
Barberton, OH 44203

PPG Delfzijl Plant  
P.O. Box 181  
9930 AD Delfzijl, The Netherlands

#### CORPORATE POLICIES

Additional PPG Policies and Practices regarding the following topics can be found at the following sites:

- PPG Ethics and Compliance: <http://corporate.ppg.com/Our-Company/Ethics.aspx>
- PPG Employees and the Workplace: <http://sustainability.ppg.com/People/Overview.aspx>
- PPG Corporate Sustainability: <http://sustainability.ppg.com/Home.aspx>
- PPG Community Involvement & Social Performance: <http://sustainability.ppg.com/Community/Community-Overview.aspx>
- Conflict Minerals Sourcing Policy  
PPG is aware of Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the Securities and Exchange Commission's (SEC) final rules requiring PPG to publicly disclose its use of certain conflict minerals. PPG has adopted a conflict minerals policy, and on June 2, 2014, PPG filed its initial conflict minerals report with the SEC describing its due diligence efforts. Both of these documents are available at <http://sustainability.ppg.com/Business/Conflict-Minerals.aspx>. Columbite-tantalite, cassiterite, wolframite, tin, and gold are not intentionally added to these products.
- The California Transparency in Supply Chains Act of 2010 :  
In January of 2012, the State of California enacted legislation (The California Transparency in Supply Chains Act of 2010 – S.B. 657) that requires retailers and manufacturers doing business in California to disclose their efforts to combat slavery and human trafficking, and to eliminate it from their direct supply chains. Please be advised of the following:
  - PPG Policies addressing employee engagement and development are located at the following address: <http://sustainability.ppg.com/People/Engagement.aspx>
  - These standards are measured for their effectiveness and reported within the corporate PPG sustainability report. <http://sustainability.ppg.com/Home.aspx>. Specific key items presented in this report are as follows:
    - How PPG engages employees
    - Ethics and Compliance Training
    - Human Rights, Corporate Reporting Incident Rate
    - Employee Engagement and Development.

#### References

#### PPG SILICA WEBSITE

[www.ppgsilica.com](http://www.ppgsilica.com)