



SAFETY DATA SHEET

1. Identification

Product identifier	SV-18002A-4 Gray
Other means of identification	
Sales Code	V#1027
Recommended use	General purpose molding rubber
Recommended restrictions	Industrial use only.
Manufacturer/Importer/Supplier/Distributor information	
Name	Shin-Etsu Silicones of America, Inc.
Address	1150 Damar Drive, Akron, OH 44305 USA
Contact	Regulation compliance group
Telephone Number	+1-330-630-9860
Fax Number	+1-330-630-9855
Emergency Phone Number	Chemtrec: +1-800-424-9300 (Within US) Chemtrec: +1-703-527-3887 (Outside US)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (fertility)	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements



Signal word	Warning
Hazard statement	Suspected of damaging fertility.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If exposed or concerned: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.
HMIS® ratings	Health: 1* Flammability: 1 Physical hazard: 0

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Quartz		14808-60-7	60 - 70
Silica, amorphous, fumed, crystalline free		112945-52-5	3 - 10
Octamethylcyclotetrasiloxane		556-67-2	1 - 3

Chemical name	Common name and synonyms	CAS number	%
Benzoyl Peroxide		94-36-0	0.3 - 1
Decamethylcyclopentasiloxane		541-02-6	0.1 - 0.3
Titanium Dioxide		13463-67-7	0.1 - 0.3
Carbon black		1333-86-4	0.025 - 0.1

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes.
Ingestion	Rinse mouth. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	By heating and fire, harmful vapors/gases may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Water runoff can cause environmental damage.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Eliminate sources of ignition. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Never return spills in original containers for re-use. Collect for salvage or disposal.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe mist or vapor. Do not breathe dust. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Use personal protective equipment as required. When curing do not breathe vapor. When curing provide adequate ventilation. Use adequate ventilation when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store locked up. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Keep in original container.

8. Exposure controls/personal protection

Occupational exposure limits	The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Benzoyl Peroxide (CAS 94-36-0)	PEL	5 mg/m3	
Carbon black (CAS 1333-86-4)	PEL	3.5 mg/m3	
Quartz (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Silica, amorphous, fumed, crystalline free (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Benzoyl Peroxide (CAS 94-36-0)	TWA	5 mg/m3	
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Benzoyl Peroxide (CAS 94-36-0)	TWA	5 mg/m3	
Carbon black (CAS 1333-86-4)	TWA	0.1 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Silica, amorphous, fumed, crystalline free (CAS 112945-52-5)	TWA	6 mg/m3	

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Decamethylcyclopentasiloxane (CAS 541-02-6)	TWA	10 ppm
Octamethylcyclotetrasiloxane (CAS 556-67-2)	TWA	10 ppm

- Biological limit values** No biological exposure limits noted for the ingredient(s).
- Exposure guidelines** Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
- Appropriate engineering controls** Provide eyewash station.
- Individual protection measures, such as personal protective equipment**
 - Eye/face protection** Tightly sealed safety glasses according to EN 166.
 - Skin protection**
 - Hand protection** Wear appropriate chemical resistant gloves.
 - Other** No special protective equipment required.



Respiratory protection

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. If ventilation is insufficient when heating use chemical respirator with organic vapor cartridge. If ventilation is insufficient when curing use chemical respirator with organic vapor cartridge.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	Gray
Odor	Odorless
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	No hazardous reaction known under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde .



11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
SV-18002A-4 Gray		
Acute		
Inhalation		
LC50	Rat	10400000 mg/m ³ , 4 hours
Oral		
LD50	Rat	10400000 mg/kg

Components	Species	Test Results
Benzoyl Peroxide (CAS 94-36-0)		
Acute		
Oral		
LD50	Rat	7710 mg/kg
Carbon black (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 8000 mg/kg
Silica, amorphous, fumed, crystalline free (CAS 112945-52-5)		
Acute		
Oral		
LD50	Rat	> 22500 mg/kg

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Causes serious eye irritation. [Dibenzoyl peroxide]

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause an allergic skin reaction. [Dibenzoyl peroxide]

Germ cell mutagenicity Not available.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzoyl Peroxide (CAS 94-36-0)	3 Not classifiable as to carcinogenicity to humans.
Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.
Silica, amorphous, fumed, crystalline free (CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Quartz (CAS 14808-60-7)	Cancer
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US. National Toxicology Program (NTP) Report on Carcinogens

Carbon black (CAS 1333-86-4)	Known To Be Human Carcinogen.
Quartz (CAS 14808-60-7)	Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility.

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Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.
Further information	This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.

12. Ecological information

Ecotoxicity	Very toxic to aquatic life. [Dibenzoyl peroxide]		
Product		Species	Test Results
SV-18002A-4 Gray			
Aquatic			
Crustacea	EC50	Daphnia	13843.5012 µg/l, 48 hr estimated
Fish	LC50	Fish	76377.916 µg/l, 96 hr estimated
<i>Acute</i>			
Crustacea	EC50	Daphnia	628.8939 µg/l, 48 h estimated
Fish	LC50	Fish	593.2974 µg/l, 96 h estimated
Components		Species	Test Results
Octamethylcyclotetrasiloxane (CAS 556-67-2)			
Aquatic			
<i>Acute</i>			
Algae	ErC10	Pseudokirchneriella subcapitata	>= 22 µg/l, 96 h
	ErC50	Pseudokirchneriella subcapitata	> 22 µg/l, 96 h
Crustacea	EC50	Daphnia magna	> 15 µg/l, 48 h
	LC50	Americamysis bahia	> 9.1 µg/l, 96 h
Fish	LC50	Cyprinodon variegatus	> 6.3 µg/l, 14 d
			6.3 µg/l, 96 h
		Oncorhynchus mykiss	> 22 µg/l, 96 h
			10 µg/l, 14 d
	NOEC	Cyprinodon variegatus	> 63 µg/l, 14 d
		Oncorhynchus mykiss	4.4 µg/l, 14 d
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	>= 15 µg/l, 21 d
Fish	NOEC	Oncorhynchus mykiss	>= 4.4 µg/l, 93 d fish early life stage toxicity
Titanium Dioxide (CAS 13463-67-7)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
Persistence and degradability	No data available.		
Photolysis			
Half-life (Photolysis-atmospheric)			
		Octamethylcyclotetrasiloxane	15.8 days, indirect photolysis
Hydrolysis			
Half-life (Hydrolysis)			
		Octamethylcyclotetrasiloxane	0.9 - 1 h (pH9; 25°C)



Hydrolysis

Half-life (Hydrolysis)

Octamethylcyclotetrasiloxane

1.8 h (pH4; 25°C)
69.3 - 144 h (pH7; 25°C)

Biodegradability

Percent degradation (Aerobic biodegradation-ready)

Octamethylcyclotetrasiloxane

OECD 301, Not readily biodegradable.

Percent degradation (Aerobic biodegradation-soil)

Octamethylcyclotetrasiloxane

0.04 days Half-life in soil, at 22 °C in tropical Wahiawa soil in closed system.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Benzoyl Peroxide

3.46

Decamethylcyclopentasiloxane

5.2

Octamethylcyclotetrasiloxane

5.1

6.49 (25.1 °C)

Biomagnification factor

Octamethylcyclotetrasiloxane

0.47, lipid-normalized steady-state
Species: Carp (Cyprinus carpio)

Bioconcentration factor (BCF)

Octamethylcyclotetrasiloxane

12400

Species: Fathead minnow (Pimephales promelas)

Mobility in soil

Adsorption

Soil/sediment sorption - log Koc

Octamethylcyclotetrasiloxane

4.22, average

Desorption

Soil/sediment desorption - log Kd

Octamethylcyclotetrasiloxane

4.3, average

Mobility in general No data available.

Volatility

Henry's law

Octamethylcyclotetrasiloxane

Log Kaw = 2.69, indicating high potential of volatilization from water.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Follow applicable Federal, State and Local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This product is not intended to be transported in bulk.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Octamethylcyclotetrasiloxane (CAS 556-67-2)

1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

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SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Quartz (CAS 14808-60-7)

Cancer
lung effects
immune system effects
kidney effects**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes**Classified hazard categories** Reproductive toxicity**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Benzoyl Peroxide	94-36-0	0.3 - 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**Carbon black (CAS 1333-86-4)
Decamethylcyclotetrasiloxane (CAS 541-02-6)
Octamethylcyclotetrasiloxane (CAS 556-67-2)
Quartz (CAS 14808-60-7)
Titanium Dioxide (CAS 13463-67-7)**California Proposition 65****WARNING:** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. This product can expose you to chemicals including Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Carbon black (CAS 1333-86-4)	Listed: February 21, 2003
Quartz (CAS 14808-60-7)	Listed: October 1, 1988
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No

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Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	04-20-2015
Revision date	07-07-2023
Version #	03
HMIS® ratings	Health: 1* Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 0 Flammability: 0 Instability: 0

NFPA ratings



Disclaimer

This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into the human body and/or injection into humans.

Revision information

Composition / Information on Ingredients: Disclosure Overrides