

SSG4607B

SAFETY DATA SHEET

1. Identification

Product identifier: SSG4607B

Other means of identification

Synonyms: Silicone Rubber Compound – Part B

Recommended use and restriction on use

Recommended use: Industrial use

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials LLC
260 Hudson River Road
Waterford NY 12188

Contact person : commercial.services@momentive.com

Telephone : General information
+1-800-295-2392

**Emergency telephone number
Supplier :** CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Toxic to reproduction	Category 1B

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %
Acute toxicity, inhalation, vapor	0 %
Acute toxicity, inhalation, dust or mist	0 %

Label Elements

Hazard Symbol:

SSG4607B



Signal Word: Danger

Hazard Statement: H315; Causes skin irritation.
H318; Causes serious eye damage.
H317; May cause an allergic skin reaction.
H360; May damage fertility or the unborn child.

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

Substance(s) formed under the conditions of use: Reacts with water liberating small amounts of methanol.

3. Composition/information on ingredients

SSG4607B

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Gamma-Aminopropyltrimethoxysilane	13822-56-5	10 - <20%	No data available.
3-glycidyl-oxypropyl-trimethoxy-silane	2530-83-8	5 - <10%	No data available.
(1) TITANIUM DIOXIDE	13463-67-7	1 - <5%	# This substance has workplace exposure limit(s).
(1) Carbon Black	1333-86-4	0.1 - <1%	# This substance has workplace exposure limit(s).
(1) Silica	7631-86-9	0.1 - <1%	# This substance has workplace exposure limit(s).
Dibutyltin Dilaurate	77-58-7	0.1 - <0.3%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	0.1 - <1%	# This substance has workplace exposure limit(s).
Aluminium hydroxide	21645-51-2	0.1 - <1%	# This substance has workplace exposure limit(s).

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

(1) The respirable particle(s) listed above are inextricably bound within the polymer matrix, and therefore does not present an inhalation hazard during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

4. First-aid measures

- Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water.
- Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
- Skin Contact:** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
- Eye contact:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SSG4607B

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Product may hydrolyze upon contact with body fluids in the gastrointestinal tract to produce additional methanol. The potential for toxic effects due to methanol formation (eye damage and blindness, metabolic acidosis, dizziness and drowsiness, fetal toxicity, and liver, kidney, and heart muscle damage) should be recognized.

5. Fire-fighting measures

General Fire Hazards: Use standard firefighting procedures and consider the hazards of other involved materials. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Reacts with water liberating small amounts of methanol. In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move container from fire area if it can be done without risk. Cool fire-endangered containers with water.

Special protective equipment for fire-fighters: Corrosive Material Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

SSG4607B

Personal precautions, protective equipment and emergency procedures:

Use only in well-ventilated areas. Avoid contact with skin and eyes. Product releases methanol during application and curing.

Methods and material for containment and cleaning up:

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section. Warn other workers of spill. Keep unauthorized personnel away.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Methanol is formed during processing. See Section 8 of the SDS for Personal Protective Equipment. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place. Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
(1) TITANIUM DIOXIDE	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) TITANIUM DIOXIDE - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) TITANIUM DIOXIDE - Particulate.	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
(1) TITANIUM DIOXIDE - Respirable fraction.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA	50 millions of particles per	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)

SSG4607B

		cubic foot of air	
(1) TITANIUM DIOXIDE	IDLH	5,000 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) Carbon Black	REL	0.1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	REL	3.5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	3.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	3.5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) Carbon Black	REL	3.5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) Carbon Black - as PAHs	REL	0.1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)
(1) Carbon Black	PEL	3.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	3.5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	3.5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Carbon Black - Particulate.	AN ESL	3.5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	ST ESL	35 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) Carbon Black	TWA PEL	3.5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	IDLH	1,750 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) Silica	REL	6 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	6 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	6 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Silica - Particulate.	ST ESL	27 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) Silica	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	IDLH	3,000 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Dibutyltin Dilaurate - as Sn	STEL	0.2 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	0.1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)

SSG4607B

	PEL	0.1 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	0.1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	0.1 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Dibutyltin Dilaurate - Particulate.	AN ESL	0.1 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	ST ESL	1 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
Dibutyltin Dilaurate - as Sn	TWA PEL	0.1 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	STEL	0.2 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Dibutyltin Dilaurate	IDLH	25 mg/m ³	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Aluminium hydroxide - Respirable fraction.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2015)
Aluminium hydroxide - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Aluminium hydroxide - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	5 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Aluminium hydroxide - Total dust.	TWA	15 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Aluminium hydroxide - Particulate.	ST ESL	50 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	5 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
Aluminium hydroxide - Respirable fraction.	TWA PEL	5 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Aluminium hydroxide - Total dust.	TWA PEL	10 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Aluminium hydroxide - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium hydroxide - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium hydroxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane - Vapor.	ST ESL	1,000 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	100 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental Exposure Level Guide, as amended (2014)

SSG4607B

This product contains one or more substances with an occupational exposure limit. However, the respirable particle(s) of this/these substance(s) are inextricably bound within the polymer matrix. Therefore, we do not expect an exposure to this/these substance(s) during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

Appropriate Engineering Controls Use only in well-ventilated areas.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Eye/face protection: Safety glasses with side shields Monogoggles Wear face shield if there is risk of splashes.

Skin Protection

Hand Protection: Rubber or plastics gloves

Other: Wear rubber apron. Wear suitable protective clothing and eye/face protection.

Respiratory Protection: Use only in well-ventilated areas. If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

Hygiene measures: Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat or drink.

9. Physical and chemical properties

Appearance

Physical state: solid
Form: Paste
Color: Gray
Odor: amine like
Odor threshold: No data available.
pH: Not applicable
Melting point/freezing point: Not applicable
Initial boiling point and boiling range: > 200 °C
Flash Point: 88 °C
Evaporation rate: < 1
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

SSG4607B

Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Heat of combustion:	No data available.
Vapor pressure:	Not applicable
Vapor density:	No data available.
Density:	1 g/cm ³
Relative density:	ca. 1
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	225 g/l ;

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Keep away from moisture. Reacts with water liberating small amounts of methanol.
Incompatible Materials:	Avoid contact with acids and oxidizing substances. Reacts with water liberating small amounts of methanol.
Hazardous Decomposition Products:	Carbon dioxide Silicon dioxide. Ammonia. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. Toxicological information

Information on likely routes of exposure

Ingestion: No data available.

SSG4607B

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

(1) TITANIUM DIOXIDE LD 50 (Rat): > 10,000 mg/kg

(1) Silica LD 50 (Rat): > 15,000 mg/kg

Dibutyltin Dilaurate LD 50 (Rat, male and female): 2,071 mg/kg

Octamethylcyclotetrasiloxane LD 50 (Rat): > 4,800 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

(1) TITANIUM DIOXIDE LD 50 (Rabbit): > 10,000 mg/kg

Dibutyltin Dilaurate LD 50 (Rat,): > 2,000 mg/kg

Octamethylcyclotetrasiloxane LD 50 (Rat): > 2,375 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

SSG4607B

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane	LC50: > 5.3 mg/l
(1) TITANIUM DIOXIDE	LC50 (Rat): > 6.8 mg/l
Dibutyltin Dilaurate	LC50 (Rat,): 10 mg/l
Octamethylcyclotetrasiloxane	LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane	NOAEL : 500 mg/kg NOAEL : 225 mg/m ³
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Skin Corrosion/Irritation

Product: Irritating to skin.

Serious Eye Damage/Eye Irritation

Product: Causes eye irritation.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

SSG4607B

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)) Positive in the Ames test.
Chinese Hamster Ovary (CHO) (OECD 476): negative (not mutagenic)
Mouse Lymphoma Assay (OECD Guideline 476) (OECD 476): positive (OECD 487) negative (not mutagenic) Literature Reference
Micronucleus test: negative (not mutagenic)

Specified substance(s):

Octamethylcyclotetrasiloxane Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)
Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)): positive
Comet Assay (OECD 489): No clear conclusions about germ cell mutagenicity was reached based on the results from this study.

Specified substance(s):

Octamethylcyclotetrasiloxane Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

SSG4607B

Other effects:

Ammonia released during curing. Contains dibutyl tin dilaurate which may cause birth defects and reproductive effects based on animal data. Octamethylcyclotetrasiloxane (D4) Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/kg/day, 14 days), developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation), with D4. Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s):	
3-glycidyl-oxypropyl-trimethoxy-silane	LC50 (Fish, 96 h): 55 mg/l
(1) TITANIUM DIOXIDE	LC0 (Leuciscus idus, 48 h): > 1,000 mg/l

SSG4607B

(1) Silica LC0 (Brachydanio rerio, 96 h): 5,000 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane EC 50 (Daphnia, 48 h): 324 mg/l

Dibutyltin Dilaurate EC50 (Daphnia magna, 48 h): < 0.463 mg/l Fresh water

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

(1) Silica LC0 (Brachydanio rerio, 4 d): 5,000 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane NOEC (Daphnia, 21 d): > 100 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane NOEC (Algae, 7 d): 119 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane The product is not readily biodegradable.

(1) TITANIUM DIOXIDE 0 %

Dibutyltin Dilaurate 23 % (39 d) The product is not readily biodegradable.

Octamethylcyclotetrasiloxane 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

SSG4607B

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Gamma-Aminopropyltrimethoxysilane No data available.

3-glycidyl-oxypropyl-trimethoxy-silane No data available.

(1) TITANIUM DIOXIDE No data available.

(1) Carbon Black No data available.

(1) Silica No data available.

Dibutyltin Dilaurate No data available.

Octamethylcyclotetrasiloxane No data available.

Aluminium hydroxide No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

SSG4607B

IATA

Not regulated.

Special precautions for user:

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

15. Regulatory information

US Federal Regulations

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

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Skin Corrosion or Irritation
- Serious eye damage or eye irritation
- Respiratory or Skin Sensitization
- Toxic to reproduction

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Gamma-Aminopropyltrimethoxysilane	10000 lbs
3-glycidyl-oxypropyl-trimethoxy-silane	10000 lbs
(1) TITANIUM DIOXIDE	10000 lbs
(1) Carbon Black	10000 lbs
(1) Silica	10000 lbs
Dibutyltin Dilaurate	10000 lbs
Octamethylcyclotetrasiloxane	10000 lbs
Aluminium hydroxide	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

SSG4607B

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including Methanol, Toluene, which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Polydimethylsiloxane
Gamma-Aminopropyltrimethoxysilane
Treated Fumed Silica
Methyltrimethoxysilane
3-glycidyl-oxypropyl-trimethoxy-silane
Dibutyltin Dilaurate
Octamethylcyclotetrasiloxane
(1) TITANIUM DIOXIDE

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) TITANIUM DIOXIDE

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

SSG4607B

Inventory Status:

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.

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

HMIS Hazard ID

Health	*	3
Flammability	0	
Physical Hazards	1	
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date: 04/06/2020

Revision Date: No data available.

Version #: 5.1

Further Information: Contains octamethylcyclotetrasiloxane which may cause reproductive effects based on animal data.

SSG4607B

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives.

Contains octamethylcyclotetrasiloxane which may cause reproductive effects based on animal data.

Keep out of the reach of children.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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