



# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 10/4/2023 Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : Thermosil T7000 Part A

#### 1.2. Recommended use and restrictions on use

Recommended use : Abradable air tight seal  
Restrictions on use : All other uses not recommended above

#### 1.3. Supplier

FMI Chemical, Inc.  
4 Northwood Drive  
Bloomfield, CT 06002  
United States  
T 860-243-3222

#### 1.4. Emergency telephone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)  
CCN 201349  
Back-up Emergency Number: 703-741-5970 (D.C, USA)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : When encapsulated in polymer: silica, carbon black, titanium dioxide is/are not expected to pose a health hazard when processed under normal conditions of use.

#### 2.4. Unknown acute toxicity (GHS US)

97.51% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)  
98.68% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)  
99.85% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Hydrolysis products of 1,1,1-trimethyl-n-trimethylsilyl silanamine with silica	CAS-No.: 68909-20-6	5 – 10	STOT RE 2, H373
Quartz	CAS-No.: 14808-60-7	1 – 5	Carc. 1A, H350
Carbon black	CAS-No.: 1333-86-4	1 – 5	Carc. 2, H351 STOT RE 1, H372
Titanium dioxide	CAS-No.: 13463-67-7	1 – 5	Carc. 2, H351

Comments : When encapsulated in polymer: silica, carbon black, titanium dioxide is/are not expected to pose a health hazard when processed under normal conditions of use.

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Abdominal pain, nausea.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: Vapors may cause fire/explosion if source of ignition is present.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Silicon oxides. Formaldehyde.

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all personal contact including breathing in the mist, spray, vapors, gas. Do not take actions involving personal risks.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear the recommended personal protective equipment.
- Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

#### 6.1.2. For emergency responders

- Protective equipment : Wear the recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate personnel to a safe area. Ventilate spillage area.

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- For containment : Contain with non-combustible inert absorbent.
- Methods for cleaning up : Take up liquid spill into absorbent material. Decontaminate surfaces and equipment with water and detergent. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Wear personal protective equipment. Do not breathe mist, spray, vapors, gas. Avoid contact with skin and eyes. Do not subject to grinding, shock, friction. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store at room temperature. Store locked up. Keep only in original container. Store in a well-ventilated place.

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Thermosil T7000 Part A

No additional information available

##### Quartz (14808-60-7)

###### USA - ACGIH - Occupational Exposure Limits

Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m <sup>3</sup> (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023

###### USA - OSHA - Occupational Exposure Limits

Local name	Quartz (Total Dust) (Silica: Crystalline)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2)) for mg/m <sup>3</sup> . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

##### Hydrolysis products of 1,1,1-trimethyl-n-trimethylsilyl silanamine with silica (68909-20-6)

No additional information available

##### Carbon black (1333-86-4)

###### USA - ACGIH - Occupational Exposure Limits

Local name	Carbon black
ACGIH OEL TWA	3 mg/m <sup>3</sup> (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2023

###### USA - OSHA - Occupational Exposure Limits

Local name	Carbon black
OSHA PEL TWA [1]	3.5 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

##### Titanium dioxide (13463-67-7)

###### USA - ACGIH - Occupational Exposure Limits

Local name	Titanium dioxide
ACGIH OEL TWA	0.2 mg/m <sup>3</sup> (Nanoscale particles. R - Respirable particulate matter) 2.5 mg/m <sup>3</sup> (Finescale particles. R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2023

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Titanium dioxide (13463-67-7)

#### USA - OSHA - Occupational Exposure Limits

Local name	Titanium dioxide (Total dust)
OSHA PEL TWA [1]	15 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Use general ventilation, local exhaust ventilation or process enclosure to keep the airborne concentrations below the permissible exposure limits. Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment.

#### Hand protection:

Protective gloves

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

No respiratory protection needed under normal use conditions

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Paste.
Color	: Black
Odor	: Mild odor
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 110 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative vapor density at 20°C	: No data available
Relative density	: 0.72
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 280000 – 300000 cP
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Incompatible materials.

### 10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Formaldehyde. Silicon oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Thermosil T7000 Part A

Unknown acute toxicity (GHS US)	97.51% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 98.68% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.85% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
---------------------------------	--

#### Carbon black (1333-86-4)

LD50 oral rat	> 8000 mg/kg body weight
---------------	--------------------------

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>Carbon black (1333-86-4)</b>	
LD50 dermal rabbit	> 2000 mg/kg body weight
<b>Titanium dioxide</b>	
LD50 oral rat	> 5000 mg/kg body weight
Skin corrosion/irritation	: Not classified
<b>Carbon black (1333-86-4)</b>	
Skin corrosion/irritation, rabbit	Not irritating
Serious eye damage/irritation	: Not classified
<b>Carbon black (1333-86-4)</b>	
Serious eye damage/irritation, rabbit	Not irritating
Respiratory or skin sensitization	: Not classified
<b>Carbon black (1333-86-4)</b>	
Local Lymph Node Assay	Not sensitive
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
<b>Quartz (14808-60-7)</b>	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
<b>Carbon black (1333-86-4)</b>	
IARC group	2B - Possibly carcinogenic to humans
<b>Titanium dioxide</b>	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified.
<b>Hydrolysis products of 1,1,1-trimethyl-n-trimethylsilyl silanamine with silica (68909-20-6)</b>	
STOT-repeated exposure	May cause damage to organs (lungs) through prolonged or repeated exposure (Inhalation).
<b>Carbon black (1333-86-4)</b>	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0071 mg/l air
NOAEL (oral, rat, 90 days)	> 1000 mg/kg body weight
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Abdominal pain, nausea.

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

#### Carbon black (1333-86-4)

EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 10000 mg/l
EC50 72h - Algae [2]	> 10000 mg/l

#### Titanium dioxide

EC50 - Other aquatic organisms [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
LOEC (chronic)	5 mg/l

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated for transport		
<b>14.2. Proper Shipping Name</b>		
Not regulated	Not regulated	Not regulated



# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	IMDG	IATA
<b>14.3. Transport hazard class(es)</b>		
Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>		
Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>		
Not regulated	Not regulated	Not regulated
No supplementary information available		

### 14.6. Special precautions for user

#### DOT

Not regulated

#### IMDG

Not regulated

#### IATA

Not regulated

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

##### Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

##### Hydrolysis products of 1,1,1-trimethyl-n-trimethylsilyl silanamine with silica (68909-20-6)

Listed on the Canadian DSL (Domestic Substances List)

##### Carbon black (1333-86-4)

Listed on the Canadian DSL (Domestic Substances List)

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Titanium dioxide

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

#### Quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)  
Listed as carcinogen on NTP (National Toxicology Program)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### Carbon black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Titanium dioxide

Listed on IARC (International Agency for Research on Cancer)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. US State regulations



#### WARNING:

This product can expose you to Carbon black (airborne, unbound particles of respirable size), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Full text of H-phrases

H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure

### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level

# Thermosil T7000 Part A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Abbreviations and acronyms	
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.