

TIG210BX

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** TIG210BX

**Other means of identification**

**Synonyms:** Thermal Grease

**Recommended use and restriction on use**

**Recommended use:** Sealant

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information** : Momentive Performance Materials - Japan LLC  
133 Nishishin-machi, Ohta-shi  
Ohta-shi 10 3738505

**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**

Not classified

**Label Elements**

**Hazard Symbol:** No symbol

**Signal Word:** none

**Hazard Statement:** not applicable

**Precautionary Statements**

**Prevention:** not applicable

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**Response:** not applicable

**Storage:** not applicable

**Disposal:** not applicable

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

**3. Composition/information on ingredients**

**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*	Notes
(1) Aluminum oxide	1344-28-1	50 - <100%	# This substance has workplace exposure limit(s).
(1) Zinc oxide	1314-13-2	10 - <20%	# This substance has workplace exposure limit(s).
Siloxanes and silicones, di-Me, Me hydrogen, reaction products with Siloxanes and Silicones, di-Me, vinyl group-terminated		10 - <20%	No data available.

\* 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**

**General information:** No action shall be taken involving any personal risk or without suitable training. Do not give victim anything to drink if he is unconscious. Consult a physician for specific advice.

**Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water. Do not give victim anything to drink if he is unconscious. Get medical attention if any discomfort continues.

**Inhalation:** Move to fresh air. Get medical attention if symptoms occur.

**Skin Contact:** After contact with skin, remove product mechanically. Wash area with soap and water. Contact physician if irritation continues.

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**Eye contact:** Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.

**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:** There is no specific antidote. Treatment is symptomatic and supportive.

**5. Fire-fighting measures**

**General Fire Hazards:** Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** All standard extinguishing agents are suitable.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** 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.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Use water spray to keep fire-exposed containers cool.

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

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Avoid contact with skin and eyes. Keep out of reach of children. Attention: Not for injection into humans. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 8 of the SDS for Personal Protective Equipment.

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**Methods and material for containment and cleaning up:**

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

**Notification Procedures:**

Avoid discharge into water courses or onto the ground. Caution: Contaminated surfaces may be slippery. Keep unprotected persons away. Caution: Contaminated surfaces may be slippery.

**Environmental Precautions:**

Do not allow runoff to sewer, waterway or ground.

## 7. Handling and storage

**Precautions for safe handling:**

Sensitivity to static discharge is not expected. Wear appropriate personal protective equipment. Keep away from food, drink and animal feeding stuffs. Use only in well-ventilated areas. Do not eat, drink or smoke when using the product.

**Conditions for safe storage, including any incompatibilities:**

Keep in a ventilated and dry location, avoid moisture under any circumstances. Keep container tightly closed.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
(1) Aluminum oxide - Respirable fraction.	TWA	1 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2015)
	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Aluminum oxide - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Aluminum oxide - Respirable fraction.	TWA	5 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) Aluminum oxide - Total dust.	TWA	10 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) Zinc oxide - Respirable fraction.	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2015)
	STEL	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2015)
(1) Zinc oxide - Dust.	REL	5 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
(1) Zinc oxide - Fume.	REL	5 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
(1) Zinc oxide - Dust.	Ceil_Time	15 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
(1) Zinc oxide - Fume.	STEL	10 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Zinc oxide - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

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(1) Zinc oxide - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Zinc oxide - Total dust.	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) Zinc oxide - Fume.	STEL	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) Zinc oxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

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**

Eye wash facilities and emergency shower must be available when handling this product.

**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

**Skin Protection**

**Hand Protection:**

Chemical resistant gloves

**Other:**

Wear suitable protective clothing and eye/face protection.

**Respiratory Protection:**

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, drink or smoke.

**9. Physical and chemical properties**

**Appearance**

**Physical state:**

solid

**Form:**

Paste

**Color:**

Gray

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<b>Odor:</b>	Faint
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available. No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	350 °C
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Heat of combustion:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	2.9 g/cm <sup>3</sup> (23 °C)
<b>Relative density:</b>	ca. 2.8
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	immiscible
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water) Log Pow:</b>	No data available.
<b>Auto-ignition temperature:</b>	450 °C
<b>Decomposition temperature:</b>	No data available.
<b>SADT:</b>	No data available.
<b>Viscosity, dynamic:</b>	No data available.
<b>Viscosity, kinematic:</b>	> 20.5 mm <sup>2</sup> /s
<b>VOC:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction if used as recommended.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerisation does not occur.
<b>Conditions to avoid:</b>	Keep away from heat, sparks and open flame.

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<b>Incompatible Materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide Silicon dioxide. Formaldehyde. 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

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Dermal</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Inhalation</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.

<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

<b>Skin Corrosion/Irritation</b>	
<b>Product:</b>	No data available.

<b>Serious Eye Damage/Eye Irritation</b>	
<b>Product:</b>	No data available.

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**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):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**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.

**Other effects:** No data available.

<b>12. Ecological information</b>
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**Ecotoxicity:**

**Acute hazards to the aquatic environment:**



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**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

(1) Aluminum oxide No data available.

(1) Zinc oxide No data available.

Siloxanes and silicones, di-

Me, Me hydrogen, reaction

products with Siloxanes

and Silicones, di-Me, vinyl

group-terminated

**Other adverse effects:** No data available.

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**13. Disposal considerations**

<b>General information:</b>	The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground.
<b>Disposal instructions:</b>	Disposal should be made in accordance with federal, state and local regulations.
<b>Contaminated Packaging:</b>	Dispose of as unused product.

**14. Transport information**

**DOT**

UN Number:	UN 3077
UN Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s.(zinc oxide)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
Packing Group:	III
Marine Pollutant:	Yes

**IMDG**

UN Number:	UN 3077
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(zinc oxide)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
Packing Group:	III
Marine Pollutant:	Yes
Limited quantity	5.00KG
Excepted quantity	E1

**IATA**

UN Number:	UN 3077
Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s.(zinc oxide)
Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
Packing Group:	III
Cargo aircraft only Packing	956
Instructions:	
Passenger and cargo aircraft	956
Packing Instructions:	

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Limited quantity:	30.00KG
Packing Instructions:	Y956
Excepted quantity	E1
Environmental Hazards:	Environmentally hazardous
Marine Pollutant:	Yes

**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):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
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**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

No SARA Hazards

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
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(1) Zinc oxide

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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(1) Aluminum oxide 10000 lbs

(1) Zinc oxide 10000 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
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(1) Aluminum oxide

(1) Zinc oxide

**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.

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**TIG210BX**

**US State Regulations**

**US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Carbon Black

Carcinogenic.

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

**Chemical Identity**

(1) Aluminum oxide

(1) Zinc oxide

Siloxanes and silicones, di-Me, Me hydrogen, reaction products with

Siloxanes and Silicones, di-Me, vinyl group-terminated

Polydimethylsiloxane

Silane, hexyltrimethoxy-

**US. Massachusetts RTK - Substance List**

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

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

(1) Aluminum oxide

(1) Zinc oxide

**US. Rhode Island RTK**

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

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**Inventory Status:**

Australia AICS:	n (Negative listing)	Remarks: None.
Canada DSL Inventory List:	n (Negative listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	q (quantity restricted)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	q (quantity restricted)	Remarks: Low Volume Exemption
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	n (Negative listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
New Zealand Inventory of Chemicals:	n (Negative listing)	Remarks: None.
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

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

**HMIS Hazard ID**

<b>Health</b>		<b>0</b>
<b>Flammability</b>		<b>1</b>
<b>Physical Hazards</b>		<b>0</b>
<b>PERSONAL PROTECTION</b>		

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

**Issue Date:** 12/19/2016

**Revision Date:** No data available.

**Version #:** 1.4

**Further Information:** No data available.

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**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.  
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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