

TSE3331K*EX(A)

SAFETY DATA SHEET

1. Identification

Product identifier: TSE3331K*EX(A)

Other means of identification

Synonyms: ADDITION CURE FLAME RETARDANT

Recommended use and restriction on use

Recommended use: Silicone Elastomer (A)

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials LLC
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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

Not classified

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: not applicable

Precautionary Statements not applicable

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

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
polyvinylsiloxane	68083-19-2	>=40 - <60%	No data available.
(1) QUARTZ	14808-60-7	>=20 - <50%	# This substance has workplace exposure limit(s).
(1) Carbon Black	1333-86-4	>=1 - <5%	# 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.

Trade secret information: ** A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

(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. Do not give victim anything to drink if he is unconscious. Get medical attention if any discomfort continues.

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: Wash with soap and water.

Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Most important symptoms/effects, acute and delayed

Symptoms: Treatment is symptomatic and supportive.

Hazards: No data available.

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Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: No data available.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: In case of fire, carbon monoxide and carbon dioxide may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

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: Keep container closed. Avoid contact with skin and eyes. Keep out of reach of children. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 8 of the SDS for Personal Protective Equipment.

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.

7. Handling and storage

Precautions for safe handling: Sensitivity to static discharge is not expected. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Keep away from food, drink and animal feeding stuffs.

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Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a 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) QUARTZ - Respirable fraction.	TWA	0.025 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
(1) QUARTZ - Respirable dust.	REL	0.05 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	0.1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) QUARTZ - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.1 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
(1) QUARTZ	PEL	0.05 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
(1) Carbon Black - Inhalable fraction.	TWA	3 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
(1) Carbon Black	REL	0.1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	3.5 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	3.5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	3.5 mg/m ³	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

No data available.

Individual protection measures, such as personal protective equipment

General information:

No data available.

Eye/face protection:

Safety glasses with side shields

Skin Protection

Hand Protection:

No data available.

Other:

Wear suitable protective clothing, gloves and eye/face protection.

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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:	Observe good industrial hygiene practices. When using do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid contact with eyes, skin, and clothing.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Black

Odor:	Faint
Odor threshold:	No data available.
pH:	not applicable
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	Not applied
Flash Point:	ca. 300 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.

Upper/lower limit on flammability or explosive limits

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.
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Vapor pressure:	No data available.
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Vapor density:	No data available.
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Density:	ca. 1.4 g/cm ³
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Relative density:	No data available.
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Solubility(ies)

Solubility in water:	Insoluble
Solubility (other):	No data available.

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Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	450 °C
Decomposition temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	No data available.

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
Conditions to avoid:	Keep away from heat, sparks and open flame.
Incompatible Materials:	Strong Acids, Strong Bases
Hazardous Decomposition Products:	Carbon dioxide Silicon dioxide. 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.
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.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

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

Dermal

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

Inhalation

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

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

(1) QUARTZ Overall evaluation: 1. Carcinogenic to humans.

(1) Carbon Black

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

(1) QUARTZ Known To Be Human Carcinogen.

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

No carcinogenic components identified

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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: Attention: Not for injection into humans. No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

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.

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BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log K_{ow})

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

polyvinylsiloxane No data available.

(1) QUARTZ No data available.

(1) Carbon Black No data available.

Other adverse effects: No data available.

13. Disposal considerations

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.

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

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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

No SARA Hazards

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>
(1) QUARTZ	10000 lbs
(1) Carbon Black	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

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

(1) QUARTZ	Carcinogenic.
(1) Carbon Black	Carcinogenic.

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

Chemical Identity

polyvinylsiloxane

(1) QUARTZ

(1) Carbon Black

Silica

CHLORO PLATINUM COMPLEX

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US. Massachusetts RTK - Substance List

Chemical Identity

(1) QUARTZ

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) QUARTZ

(1) Carbon Black

US. Rhode Island RTK

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

Inventory Status:

Australia AICS:	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive 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:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
New Zealand Inventory of Chemicals:	y (positive 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

Health	<input type="text" value="0"/>
Flammability	<input type="text" value="1"/>
Physical Hazards	<input type="text" value="0"/>
PERSONAL PROTECTION	<input type="text"/>

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

Issue Date: 06/12/2017

Revision Date: No data available.

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Version #: 1.4

Further Information: No data available.

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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