

Material Safety Data Sheet

Printing date 05/07/2012

Version Number 1.9

Reviewed on 05/07/2012

1 Identification of the substance/mixture and of the company/undertaking**Product identifier**Trade name: Monokote Type Z-146, Z-146PC and Z-146T

MSDS ID Number: Z-01816

Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.
62 Whittemore Avenue
Cambridge, MA 02140 USA

Other Country Contact Information:

For products distributed beyond the country Manufacturer/Supplier identified above
Consult Section 16 for additional emergency contact information.

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Composition/information on ingredients**Chemical characterization: Mixtures**

Description: Mixture of the substances listed below with nonhazardous additions.

Hazardous components:		
65997-15-1	Portland cement	30-50%
12001-26-2	Mica	0-30%
1318-16-7	Aluminium ore	20-25%
12174-11-7	Clay	2.0-5.0%
14808-60-7	Quartz (SiO ₂)	2.0-5.0%

3 Hazards identification**Classification of the substance or mixture**

This product contains less than 5 % quartz which is part of a natural material.
Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

Information concerning hazards for human and environment:

Harmful by inhalation and if swallowed.
Irritating to skin.
Risk of serious damage to eyes.

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Safety phrases:

Avoid exposure - obtain special instructions before use.

Keep container in a well-ventilated place.

When using do not eat or drink.

Do not breathe dust.

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

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

In case of accident or if you feel unwell, seek medical advice immediately.

See Section 13 for disposal information.

Special labelling of certain preparations:

Contains chromium (VI). May cause allergic reactions.

Hazard description: Danger**Inhalation:**

Causes respiratory tract irritation.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

Eye Contact: Causes serious eye damage.

Skin Contact:

Skin contact causes irritation

Skin contact may cause burns especially if skin is wet. This may occur without warning since little heat is sensed.

Prolonged skin contact can result in permanent damage.

May cause sensitization due to Hexavalent chromium contained in Portland Cement.

Exposure to skin may produce "cement" dermatitis which is due to the alkaline and abrasive properties of cement dust.

Skin Absorption: Not expected to be harmful if absorbed through the skin.

Ingestion: If ingested, causes irritation or burns to the linings of the mouth, esophagus and stomach

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *2

Flammability = 0

Reactivity = 0

4 First aid measures

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Supply fresh air and to be sure call for a doctor.

After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation continues, consult a doctor.

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After eye contact:

Rinse opened eye for several minutes under running water.
Seek immediate medical advice.

After swallowing: Do not induce vomiting; immediately call for medical help.

* **5 Firefighting measures**

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

* **6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.

Methods and material for containment and cleaning up:

Avoid formation of dust.
Vacuuming or wet sweeping may be used to avoid dust dispersal.
Contain wet material, then place in a suitable container.
For dry product sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the MSDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* **7 Handling and storage****Handling:****Precautions for safe handling**

Risk of serious damage to eyes.
Open and handle receptacle with care.
Prevent formation of dust.
Fit dust covers to mixers.
Do not breathe dust.
Danger of wet slippery surfaces.

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Information about protection against explosions and fires: Keep respiratory protective device available.

Storage:

Information about storage in one common storage facility: Keep respiratory protective device available.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Components with limit values that require monitoring at the workplace:

65997-15-1 Portland cement

PEL	50 mppcf or 15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **respirable fraction
TLV	1* mg/m ³ E; *as respirable fraction

12001-26-2 Mica

PEL	20 mppcf ppm <1% crystalline silica
REL	3* mg/m ³ *respirable dust; containing < 1% quartz
TLV	3* mg/m ³ *as respirable fraction

1318-16-7 Aluminium ore

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **Respirable fraction
TLV	2* mg/m ³ E; as respirable fraction

14808-60-7 Quartz (SiO₂)

PEL	see Quartz listing
REL	0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	0.025* mg/m ³ *as respirable fraction

Additional Occupational Exposure Limit Values for possible hazards during processing:

In addition to the exposure limits referenced above, the following non-specific limits for dust apply to this product; OSHA, 15 mg/m³-TWA for Total Dust and 5 mg/m³-TWA as Respirable Dust, ACGIH, 10 mg/m³-TWA as Total Dust and 3 mg/m³-TWA as Respirable Dust.

Additional information: The lists that were valid during the creation were used as basis.

Work/Hygienic Practices: The usual precautionary measures for handling chemicals should be followed.

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Personal protective equipment:**General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

In case of brief exposure or low pollution use respiratory filter device.

Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Body protection: Protective work clothing

9 Physical and chemical properties**General Information****Appearance:**

Form:	Powder
Color:	According to product specification
Odor:	Odorless
Odour threshold:	Not determined.

pH-value at 20°C (68 °F): ~12

Change in condition

Melting point/Melting range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Not determined.

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure: Not applicable.

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Density at 20°C (68 °F):	~21 LBS/CF
Vapour density	Not applicable.
Evaporation rate	Not applicable.

Solubility in / Miscibility with Water:	Insoluble.
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Segregation coefficient (n-octanol/water):	Not determined.
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Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

Other information	No further relevant information available.
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10 Stability and reactivity

Thermal decomposition: No decomposition if used according to specifications.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Hydrocarbons

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin: Irritating to skin.

on the eye: Risk of serious damage to eyes.

Ingestion: Harmful if swallowed.

Additional toxicological information:

Cement cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

12 Ecological information

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

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Behavior in environmental systems:**Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:**

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations**Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Not applicable.

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Not applicable.

Packing group

DOT, ADR, IMDG, IATA

Not applicable.

Environmental hazards:**Marine pollutant:**

No

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of**MARPOL73/78 and the IBC Code**

Not applicable.

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Transport/Additional information:**DOT****Remarks:**

Not Regulated.

15 Regulatory information**SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazardard Catagories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

North America Chemical Inventory Status**TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65**Chemicals known to cause cancer:**

12174-11-7	Clay
14808-60-7	Quartz (SiO ₂)

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

WHMIS Classification(s):

D2A - Very toxic material causing other toxic effects



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Carcinogenicity Categories**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

12174-11-7	Clay	2B, 3
14808-60-7	Quartz (SiO ₂)	1

NTP (National Toxicology Program)**K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO ₂)	K
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TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

1318-16-7	Aluminium ore	A4
14808-60-7	Quartz (SiO ₂)	A2

NIOSH-Cancer (National Institute for Occupational Safety and Health)

14808-60-7	Quartz (SiO ₂)	
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OSHA-Cancer (Occupational Safety & Health Administration)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings:

Grams/Liter = 0

International Chemical Inventory Status**European EINECS**

All ingredients are listed.

Philippines Inventory of Chemicals and Chemical Substances PICCS

All ingredients are listed.

Inventory of Existing Chemical Substances manufactured or imported in China IECSC

All ingredients are listed.

Australian Inventory of Chemical Substances AICS

All ingredients are listed.

Japan Existing and New Chemical Substance List ENCS

All ingredients are listed.

Korean Existing Chemical Inventory

All ingredients are listed.

National regulations:**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.

Non-hazardous Ingredients

65996-61-4	Cellulosic Fiber	
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65997-17-3 | Chopped continuous glass filament

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16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

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