

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M Brand Roofing Granules - 7100C, 7114C, 7118C, 7600C, 7614C & 7618C (Corona, CA)

Product Identification Numbers

 $98-0111-1311-9, 98-0111-1312-7, 98-0213-4062-9, 98-0213-4064-5, 98-0213-4079-3, 98-0213-4080-1, 98-0213-4526-3, 98-0213-4527-1, 98-0213-4549-5, 98-0213-4571-9, 98-0213-5619-5, 98-0213-5620-3\\ 7010399992, 7010352330, 7010402654, 7010352877, 7010297704, 7010402660, 7100096343, 7100096344, 7010321478, 7010321581, 7010351076, 7010400549$

1.2. Recommended use and restrictions on use

Recommended use

Granules for coating roofing shingles.

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Industrial Mineral Products

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Carcinogenicity: Category 1A.

Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Health Hazard |

Pictograms



Hazard Statements

May cause cancer.

Causes damage to organs through prolonged or repeated exposure: respiratory system

Precautionary Statements

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Response:

IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Dacite Porphyry (composition varies naturally, typically	Mixture	60 - 90 Trade Secret *
contains feldspars, amphibole, magnetite, ilmenite,		
biotite and epidote)		
Quartz (a component of Dacite)	14808-60-7	15 - 40 Trade Secret *
CERAMIC MATERIALS AND WARES, CHEMICALS	66402-68-4	3 - 7 Trade Secret *
SOLVENT REFINED HEAVY NAPHTHENIC	64741-96-4	< 0.3 Trade Secret *
DISTILLATE (PETROLEUM)		

^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Use wet sweeping compound or water to avoid dusting. Sweep up. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protective equipment (gloves, respirators, etc.) as required. Granules are not respirable. Dust generated during handling may contain respirable material. 3M does not recommend material handling methods that could damage the coating or base mineral. In particular, roofing granules should not be conveyed pneumatically, via screw conveyors, or used as a sand blasting media. These uses can cause coating and base mineral attrition which may lead to increased levels of dust generation. For industrial/occupational use only. Not for consumer sale or use.

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7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Paraffin oil		OSHA	TWA(as mist):5 mg/m3	
PETROLEUM DISTILLATES		OSHA	TWA:2000 mg/m3(500 ppm)	
Quartz (a component of Dacite)		ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz (a component of Dacite)		OSHA	TWA Table Z-	
			1(respirable):0.05	
			mg/m3;TWA Table Z-	
			3(respirable):0.1 mg/m3	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Provide local exhaust ventilation at transfer points. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used: Nitrile Rubber

Respiratory protection

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An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid Color Gray

Specific Physical Form:GranulesOdorSlight OilyOdor thresholdNot Applicable

pH [Details:CONDITIONS: SL BASIC]Not Applicable

Melting point Not Applicable **Boiling Point** Not Applicable Flash Point No flash point Not Applicable **Evaporation rate** Flammability (solid, gas) Not Classified Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable Vapor Pressure Not Applicable Vapor Density Not Applicable

Specific Gravity 2.55 - 2.70 [Ref Std: WATER=1]

Solubility in Water Nil

Solubility- non-waterNot ApplicablePartition coefficient: n-octanol/ waterNot ApplicableAutoignition temperatureNot ApplicableDecomposition temperatureNot ApplicableViscosityNot ApplicableMolecular weightNot Applicable

Percent volatile Nil

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

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Substance
None known.

Condition

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin.

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Quartz (a component of Dacite)	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Dacite Porphyry (composition varies naturally, typically contains	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg

3M Brand Roofing Granules - 7100	C, 7114C, 7118C, 7600C,	7614C & 7618C (Coro	na, CA) 05/15/20
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feldspars, amphibole, magnetite, ilmenite, biotite and epidote)			
Dacite Porphyry (composition varies naturally, typically contains	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
feldspars, amphibole, magnetite, ilmenite, biotite and epidote)			
Quartz (a component of Dacite)	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz (a component of Dacite)	Ingestion		LD50 estimated to be > 5,000 mg/kg
CERAMIC MATERIALS AND WARES, CHEMICALS	Dermal		LD50 estimated to be > 5,000 mg/kg
CERAMIC MATERIALS AND WARES, CHEMICALS	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
	Dermal	Rabbit	LD50 > 5,000 mg/kg
	Inhalation-	Rat	LC50 > 5.53
	Dust/Mist		
	(4 weeks)		
	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Dacite Porphyry (composition varies naturally, typically contains feldspars, amphibole, magnetite, ilmenite, biotite and epidote)	Professio nal judgeme nt	No significant irritation
Quartz (a component of Dacite)	Professio nal judgeme nt	No significant irritation
CERAMIC MATERIALS AND WARES, CHEMICALS	Rabbit Rabbit	No significant irritation Minimal irritation

Serious Eve Damage/Irritation

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Name	Species	Value	
CERAMIC MATERIALS AND WARES, CHEMICALS	Rabbit	Mild irritant	
	Rabbit	No significant irritation	

Skin Sensitization

Name	Species	Value		
	Guinea	Not classified		
	nio			

For the component/components, either no data are currently available or the data are not sufficient for classification.

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Quartz (a component of Dacite)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz (a component of Dacite)	In vivo	Some positive data exist, but the data are not sufficient for classification
CERAMIC MATERIALS AND WARES, CHEMICALS	In Vitro	Some positive data exist, but the data are not sufficient for classification
	In vivo	Not mutagenic
	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Quartz (a component of Dacite)	Inhalation	Human	Carcinogenic

		and animal	
CERAMIC MATERIALS AND WARES, CHEMICALS	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

For the component/components, either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Quartz (a component of Dacite)	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
CERAMIC MATERIALS AND WARES, CHEMICALS	Inhalation	pulmonary fibrosis	Not classified	Multiple animal species	NOAEL not available	
CERAMIC MATERIALS AND WARES, CHEMICALS	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
	Dermal	skin hematopoietic system liver kidney and/or bladder	Not classified	Rabbit	NOAEL 5,000 mg/kg/day	3 weeks

Aspiration Hazard

Name	Value	
	Aspiration hazard	

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility.

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EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards	
Not applicable	

Health Hazards

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	C.A.S. No.	Listing
SILICA, CRYSTALLINE (AIRBORNE	None	Carcinogen
PARTICLES OF RESPIRABLE SIZE)		
CARBON BLACK (AIRBORNE, UNBOUND	1333-86-4	Carcinogen
PARTICLES OF RESPIRABLE SIZE [= 10		
MICROMETERS])		
TITANIUM DIOXIDE (AIRBORNE, UNBOUND	13463-67-7	Carcinogen
PARTICLES OF RESPIRABLE SIZE)		

15.3. Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 1 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: *3 Flammability: 1 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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