Safety Data Sheet

Document Group:	44-1193-0	**Version Number:**	1.00
Issue Date:	02/17/23	**Supercedes Date:**	Initial Issue

SECTION 1: Identification

1.1. Product identifier
3M™ Copper Roofing Granules, Light Gray - 7070L, 7070LB (Little Rock, AR)

Product Identification Numbers
98-0111-1256-6, 98-0111-1772-2
7010352326, 7010352343

1.2. Recommended use and restrictions on use

Recommended use
Industrial use

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
Acute Toxicity (oral): Category 4.
Acute Toxicity (inhalation): Category 4.
Serious Eye Damage/Irritation: Category 1.
Carcinogenicity: Category 1A.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements
Signal word
Danger

Symbols
Corrosion | Exclamation mark | Health Hazard |

Pictograms

Hazard Statements
Harmful if swallowed.
Causes serious eye damage.
Harmful if inhaled.
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.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Rinse mouth.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:
Store locked up.

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

44% of the mixture consists of ingredients of unknown acute oral toxicity.
44% of the mixture consists of ingredients of unknown acute dermal toxicity.
96% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Feldspar-Group Minerals	68476-25-5	50 - 90 Trade Secret *
Illite	12173-60-3	< 15 Trade Secret *
Mica-Group Minerals	12001-26-2	< 15 Trade Secret *
Nepheline	1302-72-3	1 - 10 Trade Secret *
Pyroxene-Group Minerals	12174-37-7	2 - 10 Trade Secret *
Ceramic	66402-68-4	1 - 7 Trade Secret *
Amphibole-Group Minerals (Non-Asbestiform)	1318-09-8	< 5 Trade Secret *

Copper(I) Oxide (Cu2O)	1317-39-1	1 - 5 Trade Secret *
Titanium Dioxide	13463-67-7	< 5 Trade Secret *
Zeolites (Naturally Occurring)	1318-02-1	< 5 Trade Secret *
Ilmenite	12168-52-4	< 4 Trade Secret *
Magnetite	1309-38-2	< 4 Trade Secret *
Sodalite	1302-90-5	< 3 Trade Secret *
Quartz Silica	14808-60-7	< 1 Trade Secret *
Chromium(III) Oxide (Cr2O3)	1308-38-9	< 0.5 Trade Secret *
Oil	64742-52-5	< 0.5 Trade Secret *

*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:
Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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

Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
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
No special protective actions for fire-fighters are anticipated.

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 breathe dust/fume/gas/mist/vapors/spray. 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. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Use personal protective equipment (gloves, respirators, etc.) as required. Solids can generate static electricity charges when transferred and in mixing operations sufficient to be an ignition source. Evaluate the need for precautions, such as grounding and bonding, low energy transfer of material (e.g. low speed, short distance), or inert atmospheres. Do not handle until all safety precautions have been read and understood.

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
Mica-Group Minerals	12001-26-2	ACGIH	TWA(respirable fraction):0.1 mg/m3	
Mica-Group Minerals	12001-26-2	OSHA	TWA:20 millions of particles/cu. ft.	
CHROMIUM (II) COMPOUNDS	1308-38-9	OSHA	TWA(as Cr):0.5 mg/m3	
CHROMIUM (III) COMPOUNDS	1308-38-9	ACGIH	TWA(as Cr(III), inhalable fraction):0.003 mg/m3;TWA(as Cr):0.5 mg/m3	A4: Not class. as human carcin
CHROMIUM (III) COMPOUNDS	1308-38-9	OSHA	TWA(as Cr):0.5 mg/m3	
Chromium(3+), soluble salts	1308-38-9	ACGIH	TWA(as Cr(III), inhalable fraction):0.003 mg/m3	A4: Not class. as human carcin, Dermal/Respiratory Sensitizer
Chromium, insoluble salts	1308-38-9	OSHA	TWA(as Cr):1 mg/m3	
COPPER COMPOUNDS	1317-39-1	ACGIH	TWA(as Cu, fume):0.2 mg/m3;TWA(as Cu dust or mist):1 mg/m3	
Aluminum, insoluble compounds	1318-02-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

Titanium Dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m3;TWA(Respirable finescale particles):2.5 mg/m3	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m3;TWA Table Z-3(respirable):0.1 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.)	
Paraffin oil	64742-52-5	OSHA	TWA(as mist):5 mg/m3	
PETROLEUM DISTILLATES	64742-52-5	OSHA	TWA:2000 mg/m3(500 ppm)	

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:
Full Face Shield
Indirect Vented Goggles

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

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:	Granules
Odor	Oily
Odor threshold	*No Data Available*
pH	*No Data Available*
Melting point	*No Data Available*
Boiling Point	*No Data Available*
Flash Point	No flash point
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	*No Data Available*
Vapor Density	*No Data Available*
Specific Gravity	2.55 - 2.70 [*Ref Std:*WATER=1]
Solubility In Water	*No Data Available*
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
Viscosity	*No Data Available*

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

Substance	Condition
None known.	

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:
Harmful if inhaled. 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:
Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

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

Ingestion:
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:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Silica, Crystalline (Respirable Size)	14808-60-7	Known To Be Human Carcinogen.	National Toxicology Program Carcinogens
Silica dust, crystalline, in the form of quartz or cristobalite	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	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 ATE >2,000 - =5,000 mg/kg
Overall product	Inhalation-		No data available; calculated ATE >1 - =5 mg/l

	Dust/Mist(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
Feldspar-Group Minerals	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Feldspar-Group Minerals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Mica-Group Minerals	Dermal		LD50 estimated to be > 5,000 mg/kg
Mica-Group Minerals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Ceramic	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Zeolites (Naturally Occurring)	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zeolites (Naturally Occurring)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.57 mg/l
Zeolites (Naturally Occurring)	Ingestion	Rat	LD50 > 5,000 mg/kg
Copper(I) Oxide (Cu2O)	Dermal	Rat	LD50 > 2,000 mg/kg
Copper(I) Oxide (Cu2O)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.3 mg/l
Copper(I) Oxide (Cu2O)	Ingestion	Rat	LD50 500 mg/kg
Magnetite	Dermal		LD50 estimated to be > 5,000 mg/kg
Magnetite	Ingestion	Rat	LD50 > 10,000 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Oil	Dermal	Rabbit	LD50 > 2,000 mg/kg
Oil	Ingestion	Rat	LD50 > 5,000 mg/kg
Chromium(III) Oxide (Cr2O3)	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Chromium(III) Oxide (Cr2O3)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.41 mg/l
Chromium(III) Oxide (Cr2O3)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Feldspar-Group Minerals	Professional judgement	No significant irritation
Ceramic	Rabbit	No significant irritation
Zeolites (Naturally Occurring)	Rabbit	No significant irritation
Copper(I) Oxide (Cu2O)	Rabbit	No significant irritation
Magnetite	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Quartz Silica	Professional judgement	No significant irritation
Oil	Rabbit	Minimal irritation
Chromium(III) Oxide (Cr2O3)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value

Ceramic	Rabbit	Mild irritant
Zeolites (Naturally Occurring)	Rabbit	Mild irritant
Copper(I) Oxide (Cu2O)	Rabbit	Corrosive
Titanium Dioxide	Rabbit	No significant irritation
Oil	Rabbit	Mild irritant
Chromium(III) Oxide (Cr2O3)	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Copper(I) Oxide (Cu2O)	Guinea pig	Not classified
Titanium Dioxide	Human and animal	Not classified
Oil	Guinea pig	Not classified
Chromium(III) Oxide (Cr2O3)	similar compounds	Not classified

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
Ceramic	In Vitro	Some positive data exist, but the data are not sufficient for classification
Copper(I) Oxide (Cu2O)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Magnetite	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
Chromium(III) Oxide (Cr2O3)	In vivo	Not mutagenic
Chromium(III) Oxide (Cr2O3)	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Ceramic	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Quartz Silica	Inhalation	Human and animal	Carcinogenic
Oil	Ingestion	Rat	Not carcinogenic
Oil	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Chromium(III) Oxide (Cr2O3)	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Chromium(III) Oxide (Cr2O3)	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	90 days
Chromium(III) Oxide (Cr2O3)	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	90 days
Chromium(III) Oxide (Cr2O3)	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	90 days

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Copper(I) Oxide (Cu2O)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Oil	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Chromium(III) Oxide (Cr2O3)	Inhalation	respiratory system	Not classified	Rat	NOAEL 40 mg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Mica-Group Minerals	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Ceramic	Inhalation	pulmonary fibrosis	Not classified	Multiple animal species	NOAEL not available	
Ceramic	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Copper(I) Oxide (Cu2O)	Inhalation	immune system | respiratory system | heart | endocrine system | hematopoietic system | liver | nervous system | kidney and/or bladder	Not classified	Rat	NOAEL 0.002 mg/l	28 days
Magnetite	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not availble	occupational exposure
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Chromium(III) Oxide (Cr2O3)	Inhalation	immune system | respiratory system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 44 mg/m3	90 days

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

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.

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
Acute toxicity
Carcinogenicity
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Copper(I) Oxide (Cu2O) (Copper compounds except copper phthalocyanine compounds substituted with only H and/or Cl and/or Br (C32R16CuN8, R=any combination of H,Cl,Br))	1317-39-1	Trade Secret 1 - 5

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information,

including directions for use.
3M 7000 Series Copper Granules
Built-in control of algae to maintain the beauty of roofing materials
ACTIVE INGREDIENT
*Cuprous oxide (CAS number: 1317-39-1).....3.28%
OTHER INGREDIENTS.....96.72%
Total 100.00%
*(Equivalent to Metallic copper (CAS number: 7440-50-8).....2.92%)

KEEP OUT OF REACH OF CHILDREN
CAUTION
PRECAUTIONARY STATEMENTS
Engineering Controls
Use with appropriate local exhaust ventilation and at transfer points to manage particulates.
Personal Protective Equipment
Avoid eye and prolonged skin contact. Use gloves (leather, nitrile rubber or polyethylene) and wear protective clothing (long-sleeved shirt, long pants) to reduce skin contact. Safety Glasses with side shields are recommended. Note: Because manufacturing location conditions vary widely, please consult product Safety Data Sheet (SDS) for detailed particulate respiratory protection considerations while manufacturing with this product.

User Safety Requirements
Discard disposable PPE at the end of use as directed by manufacturer. For reusable PPE, follow manufacturer's instructions for cleaning and maintenance. If no instructions for washables exist, use detergent and hot water.
User Safety Recommendations
User must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage and disposal.
Pesticide Storage:
Store under ambient conditions.
Pesticide Disposal:
To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to an approved waste disposal facility. Since regulations vary, consult applicable regulations or authorities before disposal.
Pesticide Container Disposal:
Where appropriate, return empty bulk bags to 3M for reuse.
Refillable Container. Refill this container with 3M Copper Granules only. Do not reuse this container for any other purpose. Bags should be emptied of any residual granules prior to refilling. When bag condition warrants disposal, dispose of bag in a sanitary landfill or offer for recycling if available or reconditioning if appropriate.
DIRECTIONS FOR USE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
If granules are to be stored prior to (and during) use, a copy of this label must be made readily accessible to employees when they are in their work area(s).
3M 7000 Series Copper Granules contain cuprous oxide, an effective algaecide for inhibiting the growth of blue-green algae that can stain roofing materials. The granules are treated roofing granules 1-2 mm in diameter made from rock coated with cuprous oxide and sealed in a ceramic shell. The ceramic shell allows a timed release of copper to provide long-lasting algae control that extends the useful life of roofing materials. The granules are colored to match the roofing materials.
3M 7000 Series Copper Granules should be mixed with standard roofing granules at the rate of 5-20% by weight and processed normally during manufacture of the roofing materials.

WARRANTY
3M warrants that 3M 7000 Series Copper Granules conform to the ingredient statement above.

EPA Reg. No. 10350-63 Net Contents: Bulk shipment; see waybill
EPA Est. No. 10350-AR-001

(_____lbs)
Manufactured by 3M Company
Headquarters: 3M Center, St. Paul, MN 55144-1000

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

Ingredient	C.A.S. No.	Listing
Silica, crystalline (airborne particles of respirable size)	None	Carcinogen
Lead compounds	None	Carcinogen
Cobalt metal powder	None	Carcinogen
Arsenic	7440-38-2	Carcinogen
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Carcinogen
Nickel (metallic)	7440-02-0	Carcinogen
Lead	7439-92-1	Female reproductive toxin
Lead	7439-92-1	Male reproductive toxin
Lead	7439-92-1	Developmental Toxin
Titanium dioxide (airborne, unbound particles of respirable size)	13463-67-7	Carcinogen
Cadmium and cadmium compounds	None	Carcinogen
Titanium dioxide (airborne, unbound particles of respirable size)	13463-67-7	Carcinogen

15.3. Chemical Inventories

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: 3 **Flammability:** 0 **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.

Document Group:	44-1193-0	**Version Number:**	1.00
Issue Date:	02/17/23	**Supercedes Date:**	Initial Issue

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