

MATERIAL SAFETY DATA SHEET
MSDS # 1664 – ALGAE RESISTANT COLOURED ROOFING
GRANULES, DUST

SECTION I: PRODUCT INFORMATION

Material Name/Identifier: Algae Resistant Coloured Roofing Granules, Dust

Manufacturer/Supplier's Name:

IKO Industries Ltd.
P.O. Box 839
RR 1
Madoc, Ontario K0K 2K0

Emergency Tel. No.: 905-457-2880 ext. 3354

Product Use: Roofing shingles

SECTION II: HAZARDOUS INGREDIENTS

Chemical Identity	Percent	CAS #	PIN#	LD ₅₀ (oral) mg/kg ₃	LC ₅₀ (Inj.)
Dark Hard Volcanic Rock	80-95	None	None	N/A	N/A
(Fine Grained) Quartz	5-20	14808-60-7	None	N/A	N/A
Sodium silicate	<5	1344-09-3	None	330-840	N/A
Kaolin clay	<5	1332-58-7	None	N/A	N/A
Carbon black	<1	1333-86-4	None	>156	>240
Iron oxide	<1	1309-37-1	None	>5000	N/A
Sodium lignosulfonate	<1	68512-34-5	None	N/A	N/A
Chromium oxide	<1	1308-38-9	None	>10000	N/A
Petroleum oil	<0.5	64742-58-1	None	>15000	N/A
Silane	<0.1	Proprietary	None	N/A	N/A
Copper Oxide	<7	1317-39-1	None	N/A	N/A
Sodium Borate	<0.2	12179-04-3	None	N/A	N/A

SECTION III: PHYSICAL DATA

Physical State: Solid
Odour & Appearance: Coloured, angular particles of varying sizes. May have slight oil or silicone odour.
Odour threshold: N/A
Specific gravity: 2.5-2.8
Coefficient of water/oil distribution: N/A
Vapour pressure: N/A
Boiling Point: N/A
Freezing point: N/A
pH: N/A
Vapour density: N/A
Evaporation rate: N/A
Percent Volatile: 0

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SECTION IV: FIRE OR EXPLOSION HAZARD

Conditions of flammability: N/A
Means of extinction: N/A
Explosion data: N/A
Flashpoint: N/A
Upper flammable limit: N/A
Lower flammable Limit: N/A
Autoignition temperature: N/A
Hazardous
combustion products: N/A

SECTION V: REACTIVITY DATA

Stability: Stable
Incompatible materials: None known.
Hazardous
decomposition products: None known.

SECTION VI: TOXICOLOGICAL PROPERTIES

Route of entry: Skin contact, eye contact, inhalation.

Effects of acute exposure: Exposure to dust may irritate eyes, skin or respiratory system, nausea, chills, diarrhea. There is no ACGIH TLV or OSHA PEL for cuprous oxide or cupric oxide. Exposure is governed by the 8 hour TWA established for finely divided copper in dusts or mists. TWA: 1mg/m³

Effects of chronic exposure: Prolonged inhalation of the silica content in the dust may lead to a lung disease known as silicosis. Symptoms include shortness of breath, persistent cough and sputum. In acute cases, respiratory failure may occur resulting in death. Detection of silicosis is provided by chest X-ray. Exposure limits: TWAEEL*: 0.10 mg/m³

*Time weighted average exposure level **for silica** (RRO 1990, Reg. 845). Worker exposure to silica must be reduced to the lowest practical level. Effort should be made to reduce exposure to at most 0.10 mg/m³.

Irritancy of product:

Eye contact: Mechanical irritation may result in eye irritation, redness, scratching and tearing.

Skin contact: Mechanical irritation may result in dryness, itching or redness.

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Inhalation: Symptoms may include coughing, nausea, chills, diarrhea, sneezing and irritation of the throat and nose.

See above for chronic inhalation result and potential for the development of silicosis.

Carcinogenicity:

IARC MONOGRAPH VOLUME 68,1997 concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1.

Cuprous oxide, cupric oxide and copper are not carcinogenic materials as listed by OSHA (29 CFR 1910) or ACGIH(Appendix A, Threshold Limit Values for Chemical Substances 1995-1996)

SECTION VII: PREVENTATIVE MEASURES

Personal Protective Equipment:

Gloves: Work gloves recommended

Respiratory: Avoid inhalation of dust. Use NIOSH-approved respirator suitable for the airborne concentration level and in compliance with the OSHA.

Eye: Safety glasses with a side shield should be worn as a minimum protection. Dust goggles should be worn when excessively dusty conditions occur.

Other Equipment: Protective work clothing should be worn and cleaned after removal. **Do not** clean by blowing or shaking.

Engineering Controls: Proper ventilation is necessary where harmful concentrations of quartz silica may arise. Ventilation systems must be designed and maintained through regular cleaning/replacement of air filters. Consult a reliable text such as Industrial Ventilation, a Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists when designing the system.

Leak & spill procedures: Observe Personal Protective Equipment recommendations when cleaning up spilled material to protect personnel from dust exposure. A fine water spray may be used to reduce dust hazard.

Waste disposal: Re-use material where possible. Waste material must be disposed of in accordance with applicable federal, provincial and local laws or regulations.

Handling

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procedures & equipment: Refer to sections above for Personal Protective equipment required.

Storage requirements: N/A

Special shipping information: N/A

SECTION VIII: FIRST AID MEASURES

Dust inhalation: Remove to fresh air. If symptoms persist, contact a physician.

Eye contact: Wash eyes with large amounts of water. If irritation persists, contact physician.

Skin contact: Wash thoroughly with soap and water.

SECTION IX: PREPARATION INFORMATION

Prepared by: HSE Department
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