

# MATERIAL SAFETY DATA SHEET

## MSDS # 1210 - GRANULAR BITUMINOUS SHINGLE MATERIAL (GBSM)

**IMPORTANT:** Read this Material Safety Data Sheet before handling or disposing of this product. This product safety information is provided to help our customers with health, safety and/or environmental matters. We have taken reasonable effort to ensure that the test methods and sources for this data are correct and reliable, however, we give no warranty, expressed or implied, regarding its correctness. Since conditions or methods of handling and using this product are beyond our control, we do not assume responsibility and expressly disclaim liability for damages resulting from or connected with the handling, storage, use or disposal of the product.

### SECTION 1 PRODUCT AND MANUFACTURER'S INFORMATION

*Manufacturer/Supplier's Name:* IKO Industries Ltd.  
*Address:* 71 Orenda Road  
Brampton, Ontario  
L6W 1V8  
*Emergency Phone:* (905) 457-2880 - EXT. 3354  
*Product Name:* Granular Bituminous Shingle Material (GBSM)  
*Chemical Name:* Not applicable  
*Trade Name:* Recycled Asphalt Shingles  
*Chemical Family:* Not applicable  
*Formula:* Mixture of asphalt, granular surfacing, inert mineral fillers, asphalt coated glass fibers.

### SECTION 2 PREPARATION INFORMATION

*Prepared/Reviewed By:* HSE Department  
*Phone Number:* (905) 457-2880 - EXT. 3354  
*Date:* August 20, 2013

### SECTION 3 HAZARDOUS INGREDIENTS

<b>Component</b>	<b>TLV-TWA (8H)</b>	<b>%(by Wt)</b>	<b>CAS #</b>
<i>Petroleum asphalt</i>	0.5 mg/m <sup>3</sup>	<30	8052-42-4
<i>Fiber Glass</i>	5 resp. dust	<5	Not established
<i>Sulphur</i>	14 mg/m <sup>3</sup>	<1	7704-34-9
<i>Calcium Carbonate</i>	15 mg/m <sup>3</sup> (total dust)	<40	1317-65-3

\* ACGIH has recommended that the TLV-TWA for asphalt fumes be reduced to 0.5 mg/m<sup>3</sup> from 5.0 mg/m<sup>3</sup>. There is no documentation that supports this reduction as the method of measuring has changed as well as the value. The NIOSH REL remains at 5.0 mg/m<sup>3</sup>. There is no PEL for asphalt fumes listed by OSHA.

### SECTION 4 PHYSICAL DATA

*Boiling Point:* Not applicable  
*Specific Gravity:* <1.0  
*Vapor Pressure:* Not applicable  
*Evaporation Rate:* Not applicable  
*Solubility In Water:* Insoluble  
*Appearance:* Various colors, sheet material  
*Odor:* Slight petroleum odor

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### SECTION 5 FIRE AND EXPLOSION DATA

*Flash Point:* > 500F C.O.C.  
*Flammable Limits:* Not applicable  
*Extinguishing Media:* Dry chemical, carbon dioxide; water fog (water may be used to cool fire, but may cause frothing).  
*Special Procedures:* Respirators required for firefighting.

### SECTION 6 TOXICOLOGICAL PROPERTIES

*Toxicity Data:* IARC states that there is inadequate evidence that bitumens alone are carcinogenic to humans.  
*Effects of Overexposure:*  
*Inhalation:* Irritation of the upper respiratory tract may result from overexposure.  
*Skin and Eyes:* Possible skin irritation. Prolonged or repeated skin contact may cause dermatitis. Eye irritant; flush with large amounts of water.  
*Ingestion:* **DO NOT INDUCE VOMITING.** If vomiting, take care to prevent aspiration into lungs.

**WARNING:** This product may contain oxidized bitumens. The International Agency for Research on Cancer (the "IARC") published a monograph in 2013 which concluded that "occupational exposure to oxidized bitumens and their emissions during roofing operations are probably carcinogenic to humans." The IARC found that there is "limited evidence" in humans for the carcinogenicity of occupational exposures to bitumens and bitumen emissions during roofing and mastic-asphalt work. The IARC also found that there is "sufficient evidence" in experimental animals for carcinogenicity of fume condensates generated from oxidized bitumen. All other evidence of cancer in humans and experimental animals was judged "inadequate" or "limited." The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.

### SECTION 7 REACTIVITY DATA

*Stability:* Stable  
*Polymerization:* Will not occur  
*Materials to Avoid:* Strong oxidizing agents, acids, fluorine, magnesium, aluminum, alkalis.  
*Hazardous Decomposition Products:* CO<sub>x</sub>, SO<sub>x</sub>, NO<sub>x</sub>, smoke on combustion, hydrogen sulphide (storage of hot product).

### SECTION 8 PREVENTIVE MEASURES

*Spill Procedure:* *Normal housekeeping.* If product has been heated, allow to cool and harden and clean as normal product.  
*Disposal Procedure:* Follow federal, provincial/state and local laws and regulations.  
*Ventilation:* Ventilate as needed in confined areas so as to comply with exposure limits. (0.5 mg/m<sup>3</sup>-asphalt fumes, 10 ppm-hydrogen sulphide).  
*Respiratory:* When needed, use only NIOSH certified respiratory equipment.  
*Gloves:* Minimize skin contact. Use protective gloves when handling material.  
*Eye Protection:* Safety glasses should be worn.

### SECTION 9 FIRST AID PROCEDURES

*Eyes:* Wash thoroughly with water for at least 15 minutes, holding eyelids open while flushing eyes. Get medical advice if irritation develops.  
*Skin contact:* Wash hands after handling.  
*Inhalation:* Evacuate to fresh air. Give oxygen if breathing is difficult.