

SECTION 1 – SUBSTANCE IDENTITY AND COMPANY CONTACT INFORMATION

PRODUCT NAMES	Nordic, Thunderguard, Cambridge IR, Cambridge IR with ArmourZone
TRADE NAME	Mineral Surface Fiberglass Base Impact Resistant Asphalt Shingles
PRODUCT NUMBERS	4600xxx, 4605xxx, 4606xxx, 4607xxx, 4608xxx
CHEMICAL FAMILY	Not applicable
FORMULA	Mixture of asphalt, fiberglass mat, polymers, inert mineral filler, granular surfacing and talc.
PRODUCT USE	Residential Shingle Roofing
MANUFACTURER/SUPPLIER	IKO Industries Ltd. 1001 Iko Way Hillsboro Texas 76645
WEBSITE	www.iko.com
GENERAL INFORMATION	1-888-766-2468
EMERGENCY NUMBER	Chemtrec: 1-800-424-9300 (24 hours)

SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The products listed above are considered end-use or manufactured articles, and are not included in the scope of WHMIS 2015 and Globally Harmonization System (GHS). As such, the GHS/WHMIS labeling elements and classification are not included on this SDS.

SIGNAL WORD	Not applicable.
SYMBOL(S)	Not applicable.
CLASSIFICATION	Not applicable.
HAZARD STATEMENTS	H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H351 Suspected of causing cancer
PRECAUTIONARY STATEMENTS	 P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P281 Use personal protective equipment as required. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling.



MINERAL SURFACE FIBERGLASS BASE IR ASPHALT SHINGLES

	 P270 Do not eat, drink or smoke when using this product. P314 Get medical advice/attention if you feel unwell. P308+P313 If exposed or concerned: Get medical attention. P501 Dispose of content/container in accordance with local/regional/ national/international regulation.
NFPA	No information available.
HMIS	No information available.

SECTION 3 – CHEMICAL COMPOSITION AND DATA ON COMPONENTS

HAZARDOUS CHEMICAL NAME	% (w/w)	CAS NUMBER
Granules	30 - 40	n/a
Limestone	30 - 40	1317-65-3
Oxidized Asphalt (Bitumen)	10 – 20	64742-93-4
Crystalline Silica (Quartz)	1 – 10	14808-60-7
Talc	1 – 5	14807-96-6
Polymer Modified Asphalt Additive	1 – 5	(proprietary)
Fiberglass Mat	1 – 5	65997-17-3
Titanium Dioxide	0 - 0.5	13463-67-7
Carbon Black	0 - 0.5	1333-86-4
Copper Oxide	≤ 0.1	1317-39-1
Polymers	≤ 0.1	(proprietary)

INHALATION	If affected asphalt odor, remove victim to fresh air. Seek medical aid if symptoms persist.
INGESTION	Not expected to be ingested. If ingested: rinse mouth, drink plenty of water and immediately call for medical help.
SKIN CONTACT	Routine first aid treatment for cuts and abrasions from handling. Wash hands with soap and water after handling.
EYE CONTACT	Flush affected eye in a stream of water for at least 15 minutes. Consult doctor if eye(s) are inflamed.
ACUTE AND CHRONIC SYMPTOMS	Refer to section 11, Toxicological Information, for additional information.
MEDICAL ATTENTION	No additional information available.



MINERAL SURFACE FIBERGLASS BASE IR ASPHALT SHINGLES

SECTION 5 – FIRE-FIGHTING MEASURES

- FIRE FIGHTING No specific information available.
- FLAMABILITY Not flammable

PROPERTIES:

- FLASH POINT Not applicable
- FLAMMABLE Not applicable LIMITS IN AIR
- AUTO IGNITION Not applicable TEMPERATURE
- SPECIAL PPE FOR Use NIOSH approved self-contained breathing equipment when FIRE-FIGHTERS exposed to product flames or fire, as product will emit very toxic fumes on thermal degradation.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE MEASURES AND EMERGENCY PROCEDURES	Ensure adequate ventilation.
ENVIRONMENTAL PRECAUTIONS	No information available
SPILL MANAGEMENT	Normal housekeeping measures. Pick up large pieces and dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING PROCEDURE	When handling the material, wear the appropriate personal protective equipment described in section 8.
STORAGE PRECAUTIONS	Store in a dry location protected from the elements, high temperature and flames/sparks.
OTHER PRECAUTIONS	Comply with local safety standards and codes for roof work. Always use Fall Protection Systems when working on roofs. Do not walk on material that has not been securely fastened to the roof deck.



SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

	OCCUPATIONAL EXPOSURE LIMITS				
CHEMICAL NAME	ALBERTA	ONTARIO	BRITISH COLUMBIA	OSHA	ACGIH
Oxidized Asphalt (Bitumen) Fumes	TWA : 5 mg/m ³	TWA : 0.5 mg/m ³	TWA : 0.5 mg/m ³	No information available	TWA : 0.5 mg/m ³
Crystalline Silica	TWA :	TWA :	TWA :	TWA :	TWA :
(Quartz)	0.025 mg/m ³	0.10 mg/m ³	0.025 mg/m ³	0.05 mg/m ³	0.025 mg/m ³
Titanium Dioxide	TWA :	TWA :	TWA :	TWA :	TWA :
	10 mg/m ³	10 mg/m ³	10 mg/m ³	15 mg/m ³	10 mg/m ³
Carbon Black	TWA :	TWA :	TWA :	TWA :	TWA :
	3.5 mg/m ³	3 mg/m ³	3 mg/m ³	3.5 mg/m ³	3 mg/m ³

ENGINEERING MEASURES

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION	Not required under normal conditions of use. Wear NIOSH approved respiratory protection if dust or asphalt fume levels are above standard exposure limits.
SKIN AND BODY PROTECTION	Minimize skin contact. Protective gloves may be used when handling material.
EYE PROTECTION	Use safety glasses or goggles when necessary.
HYGIENE MEASURES	Wash hands with soap after handling.
OTHER CONTROLS	If contact is unavoidable, wear all necessary protective gear.

SECTION 9 – PHYSCAL AND CHEMICAL PROPERTIES

APPEARANCE (PHYSICAL STATE, COLOR etc.)	Solid, various colors, sheet material
ODOR	Slight asphalt odor
ODOR THRESHOLD	No information available.
PH	No information available.
MELTING POINT/FREEZING POINT	No information available.
INITIAL BOILING POINT AND BOILING RANGE	Not applicable.



MINERAL SURFACE FIBERGLASS BASE IR ASPHALT SHINGLES

FLASH POINT	Not applicable.
EVAPORATION RATE	Not applicable.
FLAMMABILITY	Not flammable.
UPPER/LOWER FLAMMABILITY/EXPLOSIVE LIMITS	Not applicable.
VAPOR PRESSURE	Not applicable.
VAPOR DENSITY	No information available.
MOLECULAR WEIGHT	No information available.
SOLUBILITY(IES)	Insoluble
PARTITION COEFFICIENT: N- OCTANOL/WATER	No information available.
AUTO-IGNITION TEMPERATURE	No information available.
SPECIFIC GRAVITY	> 1.0
VISCOSITY	No information available.

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY:

CHEMICAL STABILITY	Stable at ambient temperatures
POSSIBILITY OF HAZARDOUS REACTIONS	No information available
CONDITIONS TO AVOID	Avoid excessive heat.
INCOMPATIBLE MATERIALS	Strong oxidizers, strong acids, alkalis
HAZARDOUS DECOMPOSITION PRODUCTS	CO _x , SO _x , NO _x , smoke, hydrogen sulfide

SECTION 11 – TOXICOLOGICAL INFORMATION

ACUTE/CHRONIC TOXICITY WARNING: This product may contain crystalline silica (quartz). IARC MONOGRAPH VOLUME 68, 1997 concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1



WARNING: This product may contain carbon black. IARC concludes that Carbon Black is possibly carcinogenic to humans IARC classification: Group 2B.

WARNING: This product may contain Titanium Dioxide. IARC concludes that Titanium Dioxide is possibly carcinogenic to humans. IARC classification: Group 2B

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". This warning may be updated at such time as a final determination is made and IARC has published its monograph on the matter. IARC classification: Group 2A

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.

	product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	No information available.
PRIMARY ROUTE OF EXPOSURE	Inhalation
HEALTH EFFECTS:	
EYES	Excessive dust may cause mechanical eye irritation.
SKIN	Possible skin irritation and dermatitis.
INHALATION	Asphalt odor may cause mild respiratory irritation, nausea, headache and/or dizziness.
INGESTION	Ingestion is unlikely. If ingested, may cause irritation of the digestive tract.
STOT (SPECIFIC TARGET ORGAN TOXICITY)- SINGLE EXPOSURE	No information available.
STOT (SPECIFIC TARGET ORGAN TOXICITY) – REPEATED EXPOSURE	No information available.



MINERAL SURFACE FIBERGLASS BASE IR ASPHALT SHINGLES

CARCINOGENICITY Crystalline silica (quartz) is listed as IARC Group 1 (is carcinogenic to humans).

Oxidized asphalt is listed as IARC Group 2A (probably carcinogenic to humans).

Titanium Dioxide and Carbon Black are listed as IARC Group 2B (possibly carcinogenic to humans).

REPRODUCTIVE TOXICITY:

DEVELOPMENT No information available. OF OFFSPRING

SEXUAL FUNCTION No information available. AND FERTILITY

GERM CELL MUTAGENICITY No information available.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY	No information available.
PERSISTENCE & DEGRADABILITY	No information available.
BIODEGRADATION MOBILITY	No information available.
BIOACCUMULATION POTENTIAL	No information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL RECOMMENDATIONS Follow federal, provincial/state and municipal regulations.

SECTION 14 – TRANSPORT INFORMATION

No information available.

SECTION 15 - REGULATIONS

No information available.



SECTION 16 – OTHER INFORMATION		
REVISION DATE OF SDS	June 28 2024	
REPLACES THE MSDS/SDS FROM	May 16, 2023	
PREPARED BY	R&D department	
GENERAL INFORMATION	1-888-766-2468	
WEBISTE	www.iko.com	
OTHER INFO/DISCLAMERS	Read this 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.	
	NOTE: Under government regulations, an SDS is not required for this material; it is an end use product.	