

MSDS – *Enviroshake*[®] Roofing Material

MATERIAL SAFETY DATA SHEET

Enviroshake
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Visit our Website at www.enviroshake.com

This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the Material Safety Data Sheet (MSDS) contains all of the information required by the CPR.

I. PRODUCT IDENTIFICATION

Product Name: *Enviroshake*[®]
Chemical Family: Natural fibres – plastics composites
General Use: Building and Construction, Roofing
Product Description: Brownish grey tiles, 12” (0.3 m) wide by 20” (0.5 m) long.

II. COMPOSITION INFORMATION

Chemical Name	CAS Number	Conc, %	TWA, mg/m ³	STEL, mg/m ³
Reclaimed Thermoplastics		25-50	N/E	N/E
Natural Fibres	9004-34—6 (Cellulose)	25-50	N/E	N/E
Rubber Crumb		<10	N/E	N/E
Proprietary Additives*		<5	N/E	N/E

* Includes minor quantities of WHMIS regulated ingredients. These are encapsulated in the polymer matrix and are thus not “available”, even from finely divided particles such as sawing dusts.

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The **TWA** (Time-Weighted Average) exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The **STEL** (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL.

N/E = Not Established N/A = Not Applicable

III. HAZARDS IDENTIFICATION

Enviroshake[®] products are not expected to create any unusual hazards when using according to good manufacturing and industrial hygiene practices.

Human Health Hazards (short term exposure): Available data indicates that this product is not harmful. In addition, the product is unlikely to cause any discomfort or irritation except for dusts due to sawing or similar processes. Dust can irritate nose, throat and respiratory tract and may cause mechanical irritation in the eyes. PEL (OSHA) for nuisance dust is 5 mg/m³. TLV (ACGIH) for total dust exposure is 10 mg/m³.

Safety Hazards: No specific hazards.

Environmental Hazards: No specific hazards.

Other Hazards: Not classified as dangerous for supply or conveyance.

PEL – Permissible Exposure Limit
TLV – Threshold Limit Value

OSHA – Occupational Safety and Health Administration (US)
ACGIH – American Conference of Governmental Industrial Hygienists

IV. FIRST AID MEASURES

General Information:

From the available evidence, this product would appear to offer no significant health hazard by any exposure route. Consequently, First Aid is not generally required. If in doubt, contact a Poison Information Centre or a physician. In Canada call one of the Provincial Poison Information Centre (Alberta 1-800-3321414, British Columbia 1-800-567-8911, Ontario 1-800-268-9017, Quebec 1-800-463-5060), and in US call the National Poison Hotline (1-800-222-1222).

Eye Contact: Flush thoroughly with water. If irritation occurs, call a physician.

Skin Contact: Wash with soap and water.

Inhalation: If respiratory irritation, cough, shortness of breath, wheezing or chest tightness occurs after exposure to dust, remove from further exposure, seek immediate medical assistance and call for a physician.

V. ACCIDENTAL RELEASE MEASURES

From the available evidence, this product would appear to offer no significant health hazard. Consequently, Accidental Release Measures (spills) are not necessary. Where dusty condition are created as a result of cutting or sawing, wet dust down then sweep or vacuum for disposal. Personnel performing cleanup must use protective equipment.

VI. HANDLING AND STORAGE

Handling: Good personal hygiene practices should always be followed. Installers should mix the content of several bundles of the product as it specified in the Installation Guide and the Installation Video. As a safety precaution we recommend this mixing be performed on the ground. Do not burn in fireplace or use as firewood.

Storage: This product is chemically and physically stable and has no special storage requirements. Make sure that the product does not come into contact with substances listed under "Incompatibility – Materials to Avoid". Do not stack more than two skids high. Check packaging – there may be further storage instructions.

VII. PHYSICAL DATA

PHYSICAL STATE:	Solid	MELT POINT:	120-150°C
COLOR:	Brownish grey	SOLUBILITY:	Insoluble in water
ODOR:	Essentially odorless	VOLATILES:	Expected to be low at 100°C.
SPECIFIC GRAVITY:	1.100 – 1.300	VAPOUR PRESSURE:	Negligible at normal ambient temperatures

VIII. FIRE OR EXPLOSION HAZARD

Not classified as flammable but will burn. This product will ignite when exposed to heat or flame. Hazardous combustion products may include carbon monoxide, carbon dioxide. *Enviroshake*[®] materials complied the acceptance criteria for an external fire resistance rating of Class "C" for roofing application in accordance with ASTM E108 (UL-790 or UBC 15-2), tests adopted by National Fire Protection Association (NFPA 256).

FLASH POINT & METHOD	AUTOIGNITION TEMPERATURE	FLAMMABLE LIMITS	
		LOWER	UPPER
N/A	N/A	N/E	N/E

FIRE EXTINGUISHING AGENTS AND SPECIAL PROCEDURES

Any of the following extinguishing agents may be used to combat fires of this material: foam, water spray or fog. Water, dispersed with fog nozzles, may be used to cool fire exposed material and to prevent pressure build-up.

Evacuate unnecessary and unprotected personnel. DO NOT enter confined area without helmet, face-shield, bunker coat, gloves, rubber boots and a Workplace Hazardous Materials Information System (WHMIS) approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive pressure mode. Fight fire from a safe distance or a protected location.

UNUSUAL EXPLOSIVE HAZARDS: None known.

PRODUCTS EVOLVED WHEN SUBJECTED TO HEAT OR COMBUSTION

Carbon oxides (carbon monoxide and carbon dioxide), acrid fumes, and flammable hydrocarbons may be liberated as a result of thermal decomposition or combustion. Avoid the smoke and fumes that result from thermal decomposition or combustion.

IX. REACTIVITY DATA

CONDITIONS CAUSING INSTABILITY

Stable under ambient conditions.

INCOMPATIBILITY (MATERIALS TO AVOID)

Avoid contact with strong oxidizing agents. Strong acids, strong oxidizers like peroxides may react with this product and create spontaneous combustion.

HAZARDOUS POLYMERIZATION

Will not occur. Conditions to avoid: none.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous vapors from heated products are not expected to be generated under normal roofing installation temperatures and conditions. Decomposition will not occur if handled and stored properly.

Carbon oxides (carbon monoxide and carbon dioxide), acrid fumes, and flammable hydrocarbons may be liberated as a result of thermal decomposition or combustion. Avoid the smoke and fumes that result from thermal decomposition or combustion.

X. TOXICOLOGICAL PROPERTIES

LD50 ORAL (INGESTION)

N/E

THRESHOLD LIMIT VALUE (TLV)

N/E

**LD50 DERMAL
(SKIN CONTACT)**

N/E

PRIMARY ROUTES OF EXPOSURE

Skin (dermal) contact

**LC50
(INHALATION)**

N/E

EFFECT OF ACUTE (SHORT TERM) EXPOSURE:

Practically non-toxic. Toxicological data have not been determined specifically for this product. Information given is based on knowledge of the toxicology of components.

EFFECT OF CHRONIC (REPEATED) EXPOSURE:

Practically non-toxic. Toxicological data have not been determined specifically for this product. Information given is based on knowledge of the toxicology of components.

Acute Oral Toxicity:	Expected to be of low toxicity, LD50 > 2000 mg/kg
Acute Dermal Toxicity:	Expected to be of low toxicity, LD50 > 2000 mg/kg
Acute Inhalation Toxicity:	Data not available.
Skin Irritation:	Not expected to be irritating.

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Eye Irritation:

Not expected to be irritating.

Skin Sensitization:

Not expected to be a skin sensitizer.

Repeated Dose Toxicity:

Repeated exposure does not cause significant toxic effects.

Mutagenicity:

Not considered to be a mutagenic hazard.

XI. ECOLOGICAL INFORMATION

Basis for assessment:

Ecotoxicological data have not been determined specifically for this product. The information given below is based on knowledge of the ecotoxicology of components.

Mobility:

Sinks in water. Remains on surface of soil.

Persistence/Degradability:

Expected to be not inherently biodegradable. Persists under anaerobic conditions.

Bioaccumulation:

Not expected to bioaccumulate.

Acute Toxicity - Fish:

Expected to be practically non toxic, LC/EC/IC 50> 1000 mg/l

Acute Toxicity - Invertebrates:

Expected to be practically non toxic, LC/EC/IC 50> 1000 mg/l

Acute Toxicity - Algae:

Expected to be practically non toxic, LC/EC/IC 50> 1000 mg/l

Acute Toxicity - Bacteria:

Expected to be practically non toxic, LC/EC/IC 50> 1000 mg/l

Sewage Treatment:

Expected to be practically non toxic, LC/EC/IC 50> 1000 mg/l

Other Information:

Enviroshake[®] products are composite materials which by all accounts are non-toxic and biologically inactive.

XII. DISPOSAL CONSIDERATION

Waste Disposal:

Recover or recycle if possible, otherwise licensed landfill.

Product Disposal:

Same as for waste disposal.

Packing Disposal:

Remove all packaging for recover or waste disposal.

Local Legislation:

The recommendations given are considered appropriate for safe disposal. However, local, provincial, federal, international or country specific regulations take precedents. They may vary, and they may be more stringent but they must be strictly enforced and complied with.

If this material becomes a waste and has not been chemically altered, it is not considered a hazardous waste as defined by National Pollutant Release Inventory NPRI, in Canada or by Resource Conservation and Recovery Act RCRA (40CFR 261) in US.

XIII. TRANSPORT INFORMATION

Canadian Transportation of Dangerous Goods Regulations:

This material is not subject to TDG Act 1992

US Department of Transportation Classification:

This material is not subject to DOT regulations under 49 CFR Parts 171-180

International Air Transportation Association Classification:

This material is not classified as hazardous under IATA regulations

International maritime Organization - IMDG

This material is not classified as hazardous under IMDG regulations

UN, IMO, ADR/RID, ICAO Code

This material is not dangerous for conveyance under these codes.

XIV. REGULATORY INFORMATION

The regulatory information provided is not intended to be comprehensive. Other local, provincial, state, federal, international or country specific regulations may apply to this material

Canada Workplace Hazardous Materials Information System (WHMIS):

This material is not regulated under WHMIS.

Canada National Pollutant Release Inventory (NPRI):

Components of this material are not listed on the NPRI substances.

US Federal - Superfund Amendment & Reauthorization Act (SARA) Title III:

This material is not regulated under SARA Title III.

US Federal – Toxic Substances Control Act (TSCA) Inventory Status:

Components of this material are not listed on the TSCA substances.

US State – California Safe Drinking Water:

This material is not regulated by the California Safe Drinking Water Act.

US State – Toxic Enforcement Act (Proposition 65):

This material is not regulated by the Toxic Enforcement Act (Proposition 65).

US State – New Jersey Right-To-Know List:

This material is not regulated by the New Jersey Right-To-Know List.

US State – Pennsylvania Right-To-Know List:

This material is not regulated by the Pennsylvania Right-To-Know List.

EUROPE – EC Classification:

Not classified as dangerous under EC criteria.

XV. OTHER INFORMATION

Uses and Restrictions:

Enviroshake[®] materials are high engineered composites for a wide spectrum of roofing applications. Each customer, user or installer of *Enviroshake*[®] roofing materials is solely responsible for determining the suitability of the materials they select for the intended purpose.

Other Information: *Enviroshake* and *Enviroshake*[®] are registered trademarks of 2068052 Ontario Inc., carrying on business as Enviroshake, Chatham, Ontario, CANADA

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purpose of Health, Safety and Environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Advice in this document relates only to the product originally supplied. Where other materials specified in the Installation Guide are used in the installation of this product, advice should be sought on their safe handling and use.

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