



Safety Data Sheet

REVISION: 02
DATE: 2023-09-08

Product Identifier

SECTION 1. IDENTIFICATION

Product Identifier: ESR CorePro™ H101 BK
Company: Competitive Green Technologies
Emergency Telephone Number: +1 519 329 2525
+1 519 588 9395
+1 519 796 9323
+1 519 890 9165
Home Page: <http://www.competitivegreentechnologies.com>

SECTION 2. HAZARD IDENTIFICATION

Most important hazards: Not classified as hazardous

Product effects

Adverse effects to the human health: Prolonged and /or repeated contacts: Risk of skin sensitization. When handled at high temperatures, can cause serious burns.
Eye contact: Contact with eyes may cause irritation.
Skin contact: Substance may cause slight skin irritation.
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation: Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Low hazard for usual industrial or commercial handling.
Target organ effects: There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Environmental effects: This resin meets biodegradation, eco-toxicity, and disintegration criteria per ASTM D-6400 Standard

Physical and Chemical hazards

Classification of the substance or mixture: Not classified as physical hazards
Not classified as hazardous

Label elements according to regulation 1272:2008 (GHS)

Symbol: Not Applicable
Signal Word: Not Applicable
Hazard Statement: Not Applicable
Precaution Statement: Not Applicable
Precaution

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Statement:**Label elements****according to****Directive 67/548/EEC**

Not applicable

Not classified

Not applicable

Symbol:**Risk Phrases:****Safety Phrases****SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Composition %	Ingredients or impurities that contribute to the hazard
Biodegradable polymer matrix including succinates, and valeric derivates	109-52-4	Up to 75%	NONE
Biocarbon - New Carbon	N/A	Up to 20%	NONE
Inorganic & Organic Fillers	14807-96-6	Up to 20%	NONE

SECTION 4. FIRST-AID MEASURES**Inhalation:**

Move to fresh air. Call a physician immediately.

Skin Contact:

Rinse immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer.

Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion:

Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical.

Most Important Symptoms and Effects, Acute and Delayed:

In case of dust formation and inhalation, may cause coughing and sneezing.

Immediate Medical Attention and Special Treatment:

Avoid contact with this product while helping the victim. Keep the victim in rest and warm. Do not provide anything to an unconscious person. The symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances and respiratory care.

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SECTION 5. FIRE-FIGHTING MEASURES

Fire Extinguishing Media:	CO ₂ , dry chemical, foam, alcohol or water fog
Special hazards arising from the substance or mixture:	Formation of toxic products through combustion: Carbon oxides, Hydrogen bromide.
Advice for firefighters:	Cool closed containers with pulverized water. Firefight at safe distance. Evacuate the safe area. Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:	Use personal protective equipment. Remove all sources of ignition. Avoid dust formation. Do not breathe vapors/dust Sweep up to prevent hazard slipping.
Control of dust:	Not applicable. The product doesn't generate dust.
Removal of ignition sources:	Product isn't flammable. Eliminate preventatively all the ignition sources around the area. Do not smoke in the area.
Provision of sufficient ventilation:	Use in a well-ventilated area.
Prevention of inhalation and skin, mucous membranes and eye contact:	Avoid contact with eyes. Use appropriate personal protective equipment.
Environmental precautions:	Do not let this chemical enter the environment (soil, waterways and groundwater).
Methods and material for containment and cleaning up:	Do not dispose directly on the environment or the sewer. Use a method that does not generate dust. Collect the material in proper container and remove them to safe place.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:	Handle in a well-ventilated area or with a general system of local ventilation/exhaustion. Avoid contact with eyes and clothing. Remove ignition sources and heat. Do not smoke. Use exposure control measures and personal protective equipment.
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Conditions for Safe

Storage:

Keep the product in its original packaging and in a cool, dry, safe from direct sunlight and fireproof place. Keep the container tightly sealed and closed. Keep away from food. Keep away from children.

Incompatibilities: fluorine, strong acids, strong oxidizers, chlorated solvents and aromatic compounds.

Hygiene advice:

Do not eat, drink, or smoke when using this product. Wash hands before.

Packaging

The resin should be packaged in aluminum bags to prevent moisture

Materials:

absorption and degradation.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate

Engineering

Controls:

Provide mechanical ventilation or direct exhaust to the external media. It is recommended safety shower and eye bath available near work site. The engineering controls measures are the most effective to reduce exposure to the product.

Individual Protection Measures

Eye/Face

Protection:

Safety goggles with lateral protection. Avoid using contact lenses while handling this product.

Skin and Hand protection:

Suitable protective suit.

Respiratory

protection:

Does not require specific respiratory equipment.

Thermal hazard:

Complete air-ventilated suit, with air supply, or any thermo-resistant clothing available.

Environmental

exposure controls:

Do not discharge directly into the environment or in to the sewer system. The dilution water from firefighting can cause pollution.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Black, Solid, round or oval.

Odour:

None

Odour Threshold:

Not applicable.

pH:

Not applicable.

Melting Point and

Not applicable.

Freezing Point:

Not applicable.

Initial Boiling Point

Not applicable.

and Boiling Range:

Flash Point:

Not applicable.

Evaporation Rate:

Not applicable.

Flammability (solid, gas):

Not applicable.

Upper and Lower

Not applicable.

Flammability or

Explosive Limit:

Vapour Pressure:

Not applicable.

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Vapour Density (air = 1):	Not applicable.
Relative Density (water = 1):	>1g/cm ³
Solubility:	Insoluble in water.
Viscosity	Not available.
Explosive properties:	Not available.
Oxidizing properties:	Not available.
Other information:	Maximum time of storage is 24 months after production.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:	Combustible gases are released at the temperature over 230°C.
Conditions to Avoid:	High temperatures. Incompatible materials.
Incompatible Materials:	Strong oxidizers
Hazardous Decomposition Products:	Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide. Carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Acute Toxicity LD50 (oral):	Non-toxic product.
Skin Corrosion / Irritation:	Not irritating.
Serious Eye Damage / Irritation:	Not irritating.
STOT (Specific Target Organ Toxicity) - Single Exposure:	At powder or dust form, may cause respiratory irritation with coughing and sneezing.
Aspiration Hazard	There are not any known aspiration effects.
STOT (Specific Target Organ Toxicity) - Repeated Exposure:	There are not any known repeated exposure effects.
Respiratory and/or Skin Sensitization:	Epidemiological studies showed a very low skin sensitization potential.
Carcinogenicity:	There are not any known carcinogenicity toxicity effects.
Germ Cell Mutagenicity:	There are not any known germ cell mutagenicity effects.

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Reproductive Toxicity:

There are not any known reproductive toxicity effects.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

There are not any known ecological toxicity values. Wildlife, especially small fish may digest pellets. Pellets are not toxic but may block the digestive tract and cause starvation or death.

Persistence and Degradability:

High persistence is expected. Meets degradability of ASTM D-6400 Standard.

Bioaccumulative Potential:

Does not bioaccumulate. Inherently biodegradable.

Mobility in Soil:

Not available.

Results of PBT and vPvB assessment:

Not available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods:

Controlled incineration or landfill according to local, state or national laws and regulations concerning health and pollution.

SECTION 14. TRANSPORT INFORMATION

Land (Road/Rail):

UN – “United Nations”
Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations

Waterways (Sea/Inland):

IMO – International Maritime Organization
International Maritime Dangerous Goods Code (IMDG Code)

Air:

IATA – International Air Transport Association
Dangerous Goods Regulation (DGR)

Environmental Hazards:

Not Hazardous.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Consult regulations:
- International Maritime Organization. MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2007.
- International Maritime Organization. IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk; With Standards and guidelines relevant to the code. IMO, London, 2007.

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SECTION 15. REGULATORY INFORMATION

**Safety, Health and
Environmental
Regulations
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- Labour Organization C170 Chemicals Convention, from June 25th, 1990:
Occupational Safety and Health – Toxic Substances and Agents.

**Dangerous and
Preparations:**

Inventories:

SECTION 16. OTHER INFORMATION

Disclaimer: Competitive Green Technologies warns that the handling of any chemical substance requires the previous knowledge of its hazards for the user. It is the responsibility of the user enterprise to promote the training of its employees and contractors about the possible risks arising from the product.

This information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information. We assume no liability resulting in its use. Users should make their own investigations to determine the suitability of the information for their particular purposes and Competitive Green Technologies (CGT) does not assume any liability of any kind for any claims, losses or damages, howsoever arising, even if CGT has been advised of the possibility of such damages.

Food Contact Declaration:

Generally Recognized as Safe (GRAS) - substance is GRAS under the conditions of its intended use.

