

Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200 Standard must be
Consulted for specific requirements

U.S. Dep. of Labor
Occupational Safety and Health Admin.
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Product Identity (as used on label & list)

GREENKLEEN

HMIS/NFPA HAZARD
ID SYSTEM

Section I: Identification

Supplier Name:	Emergency Telephone Number	Health:	1
Hot Melt Technologies, Inc.			
Address:	Tel/Fax Numbers for Information	Flammability:	1
1723 W Hamlin Road	Tel: 248-853-2011		
Rochester Hills, MI 48309		Reactivity:	1
		Personal Protection:	B

Section II: Hazards Identification

<u>Emergency overview</u>	
Color	Green
Physical State	Solid
Odor	Slight Hydrocarbon when warm
OSHA/HCS Status	This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hazard Statement	This product can cause burns when exposed to skin at elevated temperatures.
Routes of Entry	Eyes, Skin, Ingestion, Inhalation
<u>Potential acute health effects</u>	
Inhalation	None expected
Ingestion	None at room temperature
Skin	Molten component can cause burns
Eyes	Hot fumes may cause irritation

Section III: Composition/Information on Ingredients

Chemical Name	CAS #	% Weight	% Volume	Listed Carcinogen
Ethyl cellulose	9004-5-73	see note	see note	No
Mineral Oil	647-42525	see note	see note	No
Castor Oil	8001-79-4	see note	see note	No
Soya Oil	8013-07-8	see note	see note	No
Refined Wax	64742-43-4	see note	see note	No

Note: percentages not provided in order to protect trade secret formula under HCS 2012 (i)(1).

Section IV: First Aid Measures

Eye Contact	If exposed to fumes or smoke, flush eyes immediately with water followed by removing contact lenses if applicable and repeating rinse. Get medical attention if irritation persists.
Skin Contact	Not hazardous other than when hot and molten. If molten liquid contacts skin then treat as an oil burn.
Inhalation	Respiratory irritation not expected unless the product is heated to a point of fuming. If fumes are inhaled removed immediately to fresh air and get prompt medical attention.
Ingestion	Non-hazardous but rinse mouth and do not induce vomiting if swallowed. Get prompt medical attention if swallowed.
Protection of Responders	No unusual precautions are necessary.

Section V: Fire Fighting Measures

Appropriate Extinguishing media	Dry chemical, CO ₂ , alcohol-resistant foam, H ₂ O fog
Fire Fighting Precautions	Keep untrained personnel away from the fire. Soak thoroughly with appropriate extinguishing media and keep cool to prevent reigniting.
Special Protective Equipment for Fire Fighters	Wear positive pressure self-contained breathing apparatus and protective fire fighting clothing.
Hazardous Thermal Decomposition Products	Smoke and fumes generated from fire or combustion may contain but not necessarily limited to NO _x , CO ₂ and CO.

Section VI: Accidental Release Measures

Spills or Leaks	Handle as a thermoplastic. With molten spills, allow the material to solidify and cool. Keep material out of sewers and watercourses by diking or impounding. Recover and place into appropriate containers for recycling or disposal according to local, state and federal laws.
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Section VII: Handling and Storage

As a solid, avoid contamination by keeping in closed containers. Keep away from incompatible materials.

Section VIII: Exposure Controls/Personal Protection

This material will be utilized in a molten form. Proper protective splash resistant clothing, thermal gloves, splash resistant shoes and eye shields must be worn to prevent injury. Use molten material in well-ventilated area. When working in confined areas or areas without adequate ventilation use appropriate respiratory equipment.

Section IX: Physical and Chemical Properties

Softening Point	246 F	Boiling Point	> 700 F
Flash Point	395 F	Specific Gravity (H ₂ O = 1)	1.032
Vapor Pressure	< 0.1 mmHg	Evaporation Rate	Negligible
Solubility in Water	< 1 ppm	Appearance and Odor	100% solid, wax odor

Section X: Stability and Reactivity

Stability	Unstable	Conditions to avoid: Dipping in excess of flash point	
	Stable	X	
Incompatibility (materials to avoid): Strong acids and alkalis			
Hazardous decomposition or byproducts: None known			
Hazardous	May Occur	Conditions to avoid: Dipping in excess of F.P.	
Polymerization	Will Not Occur	X	

Section XI: Toxicological Information of ingredients

Ingredient	ROE	Carc	LD50	LC50	TLV/TWA	Mutagen	Repr	Neuro	Tera
Ethyl cellulose	S,E,I	No	>5000 mg/kg			N/A	No	No	No
Mineral Oil	S,E,I	N/A	>2000 mg/kg	5.7 mg/l	N/A	N/A	N/A	N/A	N/A
Castor Oil	S,E,I	N/A	>5000 mg/kg	N/A	N/A	N/A	N/A	N/A	N/A
Soya Oil	S,E,I	No	N/A	N/A	N/A	No	No	No	No
Refined Wax	S,E,I	No	N/A	N/A	2 mg/m ³	No	No	N/A	No

Section XII: Ecological Information

Bio-Toxicity (plants/animals)	Not expected
Aquatic Toxicity	Not expected
Soil Mobility	Product is solid at temperatures below 100 F
Degradability	Product is completely biodegradable

Section XII: Ecological Information (cont.)

Bioaccumulation potential	Not determined
Other adverse effects	Not determined

Section XIII: Disposal Considerations

This product in its pure solid form at room temperature is not considered hazardous and can normally be disposed of by incineration or by landfill according to federal, state and local regulations for this type of product. Dispose of surplus and non-recyclable product via a licensed waste disposal contractor.

Refer to Section 7: Handling and Storage and Section 8: Exposure Controls/Personal Protection for additional handling information and protection of employees.

Section XIV: Transport Information

DOT Proper Shipping Name	Not regulated
DOT Hazardous Classification	Not applicable
DOT Hazardous Material 172.101	Not listed
DOT Appendix to Section 172.101	Not listed
DOT Labels Required	None
DOT Placards Required	None for solid products None for molten products shipped at below 212 F Hot molten product shipped over 212 F requires a class 9 "HOT" placard. Bill of lading must carry the statement: Elevated temperature material, liquid, N.O.S. 9, UN3257, III (Wax).
IATA	Not Regulated
TDG classification	Not controlled under TDG (Canada)

Section XV: Regulatory Information

Section XV: Regulatory Information cont:

Superfund Amendments and Reauthorization Act (SARA) of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313: This material contains no known products restricted under SARA Title III, Section 313.

OSHA Hazard Communication Standard:
This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

U.S. Toxic Substances Control Act (TSCA): All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.
California Safe Drinking Water & Toxic Enforcement Act (Proposition 65): This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.
CEPA - Domestic Substances List (DSL): All substances contained in the product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
RCRA: This material is not a RCRA hazardous waste.

Section XVI: Other

Legend of Abbreviations

Designation	Meaning
OSHA	Occupational Safety and Health Administration
HCS	Hazard Communication Standard
CFR	Code of Federal Regulations
CAS	Chemical Abstract Service
DOT	Department of Transportation
HMIS	Hazardous Materials Identification System
NFPA	National Fire Protection Association
RCRA	Resource Conservation and Recovery Act
PPM	Parts per Million
F.P.	Flash Point
ROE	Routes of Entry
S, E, I	Skin, Eyes, Inhalation
N/A	Not Available
N.O.S.	Not Otherwise Specified
>	Greater Than

Hazard Ratings: Health: 1 Flammability: 1 Reactivity: 1 Specific Hazard: 0

We believe the information included on this Material Safety Data Sheet to be correct, to the best of our knowledge. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that tests be made in a laboratory or plant to determine if this product meets all of your requirements. It is the responsibility of the buyer/user to determine the suitability of this product for his/her application/requirements.