

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

078914593

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078914486



1245 California Avenue,  
Brockville, ON K6V 7N5

For Product Questions call: 613-342-8455  
For Health and Safety Questions call: 613-342-8455  
24 Hour Emergency Spill Contact call: 800-424-9300 Chemtrec (US/Canada)

## Material Safety Data Sheet

### I. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** GREEN PASTE  
**Product Code:** 706-GTG247304  
**MSDS Code:** MSD-00586174  
**Revision Number:** 8  
**Revision Date:** 2014-01-24 16:19:43

### II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%
Sodium Salt of Sulfonated Castor Oil	10 - 30
Shellac	1 - 5

Please see Section VIII for product and component exposure guidelines.

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

### III. HAZARDS IDENTIFICATION

**HMIS Rating**    **Health:** 1                      **Flammability:** 0                      **Reactivity:** 0  
**HMIS Flammability based upon firepoint exemption.**

**This product falls under the following WHMIS class:**

This product is not controlled. Ce produit n'est pas contrôlé.

#### Immediate (Acute) Health Effects by Route of Exposure

**Inhalation:** Can cause minor respiratory irritation.  
**Skin Contact:** Can cause minor skin irritation, defatting, and dermatitis.  
**Eye Contact:** Can cause minor irritation, tearing and reddening.  
**Ingestion:** Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort.

#### Long-Term (Chronic) Health Effects

**Reproductive and Developmental:** No data available to indicate product or any components present at greater than 0.1% may cause birth defects.  
**Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

**Ingredients of this product appear on the following OSHA identified carcinogen lists at  $\geq 0.1\%$  by weight (yes/no):**

OSHA	No	NTP	No	IARC 1 & 2A	No	NIOSH	No
				IARC 2B	No		

GREEN PASTE

Page 1 of 4

---

#### IV. FIRST-AID MEASURES

---

<b>Inhalation:</b>	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen.
<b>Eyes:</b>	Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.
<b>Skin Contact:</b>	Wash with soap and water. Get medical attention if irritation develops or persists.
<b>Ingestion:</b>	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

---

#### V. FIRE FIGHTING MEASURES

---

<b>Flammability Summary:</b>	Combustible at elevated temperatures NFPA IIIB (NFPA description only; not to be used for shipping purposes)
<b>Extinguishing Media:</b>	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
<b>Fire and/or Explosion Hazards:</b>	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.
<b>Fire Fighting Methods and Protection:</b>	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Use methods for the surrounding fire.
<b>Hazardous Combustion Products:</b>	Carbon dioxide, Carbon monoxide
<b>Flash Point:</b>	93 C (200 F) and greater
<b>Firepoint:</b>	Firepoint calculated >212F (100C)
<b>Autoignition Temperature:</b>	Not determined deg. C deg F

---

#### VI. ACCIDENTAL RELEASE MEASURES

---

<b>Personal Precautions and Equipment:</b>	No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section VIII of this MSDS.
--	--

---

#### VII. HANDLING AND STORAGE

---

<b>Handling Precautions:</b>	No special handling instructions due to toxicity. As with all chemicals, good industrial hygiene practices should be followed when handling this material.
<b>Storage Conditions:</b>	No special requirements. Keep container closed when not in use. Protect from freezing.

---

#### VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

<b>Engineering Measures:</b>	Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.
------------------------------	--

<b>Respiratory Protection:</b>	General or local exhaust ventilation is the preferred means of control. If general or local exhaust ventilation is not available or sufficient to control or eliminate symptoms as described in Section III, respiratory protection should be used.
<b>Eye Protection:</b>	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.
<b>Skin Protection:</b>	Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
<b>Gloves:</b>	Wear impervious material no specific details available.

#### Exposure Guidelines:

Chemical Name	OSHA Exposure Limits	ACGIH TLV - TWA	ACGIH STEL	IDLH
Sodium Salt of Sulfonated Castor Oil				
Shellac				

If this product is provided in a dry powder state it should be considered a nuisance dust (PEL 10 mg/m3).

If the processing of this product produces a mist it should be considered to be an oil mist with a PEL of 5 mg/m3.

### IX. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Paste
<b>Solubility in Water:</b>	Not determined
<b>Volatiles, % by wt:</b>	23.5
<b>Volatiles, % by vol:</b>	34.08
<b>Volatile Organic Chemicals % by wt:</b>	0.00
<b>Volatile Organic Chemicals % by vol:</b>	0.00
<b>VOC lb/gal</b>	0.00
<b>VOC lb/gal (less water):</b>	0.00
<b>Solids % by weight:</b>	76.5
<b>Solids % by volume</b>	65.92
<b>Boiling Point:</b>	Not determined deg. C deg. F
<b>Specific Gravity:</b>	1.45
<b>Bulk Density (Lb/Gal):</b>	12.08

### X. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	None known.
<b>Materials to Avoid/Chemical Incompatibility:</b>	Strong oxidizing agents.

### XI. TOXICOLOGICAL INFORMATION

#### Component Toxicology Data (NIOSH):

Chemical Name	LD50/LC50
Sodium Salt of Sulfonated Castor Oil	No data available
Shellac	No data available

GREEN PASTE

## **XII. DISPOSAL CONSIDERATIONS**

<b>Waste Description for Spent Product:</b>	Spent or discarded material is not expected to be a hazardous waste.
<b>Disposal Methods:</b>	Dispose in accordance with Federal, State, Provincial and Local regulations. Material may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste management contractor. This material should be recycled if possible.

## **XIII. REGULATORY INFORMATION**

<b>TSCA Status</b>	All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
--------------------	---

<b>Chemical Name</b>	<b>CAS #</b>	<b>Regulation</b>	<b>Percentage</b>
Not on list		CERCLA	
Not on list		HAP	
Not on list		NPRI (Cdn)	
Not on list		PROP 65	
Not on list		SARA 313	
Not on list		SARA EHS	

### **The following items require export notification for TSCA**

**Chemical Name**

Castor oil, sulfated, sodium salt

**TSCA 12b list section**

Section 4, 1 % de minimus concentration

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains information required by the Controlled Products Regulations.

## **XIV. ADDITIONAL INFORMATION**

**Disclaimer:** Ketchum Manufacturing Inc. has prepared this Material Safety Data Sheet ("MSDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this MSDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this MSDS shall not constitute a warranty with respect thereto.

MONTREAL

# SAFETY DATA SHEET

V3UM600Y01

## Section 1. Identification

**GHS product identifier** : AMARK GREEN PASTE  
**Product type** : Liquid.  
**SDS #** : a45b:60jk:8j8

### Relevant identified uses of the substance or mixture and uses advised against

Printing ink or additive.

Uses advised against	Reason
Not applicable.	

**Supplier's details** : Ketchum Mfg.  
1245 California Ave.  
Brockville, ON Canada  
K6V 7N5

**Emergency telephone number (with hours of operation)** : For Product Questions during business hours call (613) 342-8455  
For Health and Safety Questions during business hours call (613) 342-8455  
24 Hour Emergency Spill Contact call: (800) 424-9300 Chemtrec (US/Canada)

## Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

### GHS label elements

**Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Not applicable.  
**Response** : Not applicable.  
**Storage** : Not applicable.  
**Disposal** : Not applicable.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Castor oil, sulfated, sodium salt	10 - 30	68187-76-8
Disodium Tetraborate Decahydrate	.1 - 1	1303-96-4

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

**Date of issue/Date of revision** : 10/17/2018 **Date of previous issue** : 7/25/2017 **Version** : 4.01 1/8

## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- |                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.   |
| <b>Inhalation</b>   | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.   |
| <b>Skin contact</b> | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  |
| <b>Ingestion</b>    | : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- |                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : No known significant effects or critical hazards. |
| <b>Inhalation</b>   | : No known significant effects or critical hazards. |
| <b>Skin contact</b> | : No known significant effects or critical hazards. |
| <b>Ingestion</b>    | : No known significant effects or critical hazards. |

#### Over-exposure signs/symptoms

- |                     |                     |
|---------------------|---------------------|
| <b>Eye contact</b>  | : No specific data. |
| <b>Inhalation</b>   | : No specific data. |
| <b>Skin contact</b> | : No specific data. |
| <b>Ingestion</b>    | : No specific data. |

### Indication of immediate medical attention and special treatment needed, if necessary

- |                                   |   |
|-----------------------------------|---|
| <b>Notes to physician</b>         | : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| <b>Specific treatments</b>        | : No specific treatment.  |
| <b>Protection of first-aiders</b> | : No action shall be taken involving any personal risk or without suitable training.  |

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- |                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | : Use an extinguishing agent suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | : None known.   |

## Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds  
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid.

**Color** : Green.

**Odor** : Not available.

**Odor threshold** : Not available.

**pH** : Not available.

**Melt point/Freeze point** : Not available.

**Boiling point** : Not available.

**Flash point** : Higher than 93.3°C (200°F).

**Date of issue/Date of revision**

: 10/17/2018

**Date of previous issue**

: 7/25/2017

**Version** : 4.01

4/8

## Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Density	: 13,786 lbs/gal
<u>VOC data</u>	
VOC % by weight	: 0
VOC % by volume	: 0
VOC lbs/gallon	: 0
VOC lbs/gal less water	: 0

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

## Section 11. Toxicological information

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

Not available.

## Section 12. Ecological information

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>DOT Classification</b>	<b>TDG Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not applicable.	Not applicable.	Not applicable.	Not applicable.
<b>UN proper shipping name</b>				
<b>Transport hazard class(es)</b>				
<b>Packing group</b>				
<b>Environmental hazards</b>				
<b>Additional information</b>	-	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : The following components are listed: Copper (and its compounds)

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory** : All components are listed or exempted.

## Section 16. Other information

### History

**Date of printing** : 10/18/2018

**Date of issue/Date of revision** : 10/17/2018

**Date of previous issue** : 7/25/2017

**Version** : 4.01

**Date of issue/Date of revision** : 10/17/2018 **Date of previous issue** : 7/25/2017 **Version** : 4.01 7/8

## Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973  
as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

Indicates information that has changed from previously issued version.

### Notice to reader

Ketchum Mfg has prepared this Safety Data Sheet ("SDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this SDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this SDS shall not constitute a warranty with respect thereto.