MATERIAL SAFETY DATA SHEET

CALUMET
SPECIALTY PRODUCTS PARTNERS, L.P.

1. Product and Company Identification

Material name	Drakeol® 7 LT MIN OIL NF
Version #	07
Revision date	08-11-2011
CAS #	8042-47-5
Manufacturer information	Calumet Specialty Products Partners, L.P. 2780 Waterfront Pkwy E. Dr. Suite 200 Indianapolis, IN 46214 United States www.calumetlubricants.com Technical Services 317-328-5660 CHEMTREC International 703-527-3887

2. Hazards Identification

OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential environmental effects	Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
White mineral oil	8042-47-5	100

4. First Aid Measures

First aid procedures

Eye contact	Product is non-irritating.
Skin contact	Product is non-irritating.
Inhalation	Not applicable.
Ingestion	Not applicable.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemicals.
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away.
Methods for containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Scrub the area with detergent and water. Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage

Handling	DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Avoid prolonged exposure.
Storage	Keep away from heat and sources of ignition. Store in a well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Personal protective equipment	
Eye / face protection	Do not get in eyes. Chemical goggles are recommended.
Skin protection	Wear appropriate chemical resistant clothing. Chemical resistant gloves.
General hygiene considerations	Do not get in eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Product is water-white liquid.
Physical state	Liquid.
Form	Liquid.
Color	Transparent Water-White
Odor	None.
Boiling point	> 599 °F (> 315 °C) estimated
Flash point	360 °F (182.2 °C) ASTM D92
Auto-ignition temperature	579.2 °F (304 °C) estimated
VOC	4 % EPA Method 24
Viscosity	70 SUS ASTM D2161
Viscosity temperature	100 °F (37.8 °C)
Pour point	-17 °F (-27.2 °C) ASTM D97
Other data	
Density	0.8749 g/cm3
Kinematic viscosity	< 13.6 mm^2/s ASTM D445
Kinematic viscosity temp	104 °F (40 °C)

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Not available.
Hazardous decomposition products	Not available.

11. Toxicological Information

Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Skin corrosion/irritation	Product is non-irritating.

12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT NON-BULK

Not regulated as dangerous goods.

DOT BULK

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 0
Flammability: 1
Instability: 0

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.

Issue date 08-11-2011

This data sheet contains changes from the previous version in section(s): Physical & Chemical Properties: Multiple Properties

bigler Specialty Oils LP

Material Safety Data Sheet

Date of Issue: Aug 1, 2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: MaxPar White Mineral Oil USP and NF
Synonyms:

MaxPar NF 50
MaxPar NF 70
MaxPar NF 80
MaxPar NF 90
MaxPar NF 100

MaxPar GDO-75
MaxPar USP 175
MaxPar USP 210
MaxPar USP 350
MaxPar BSO 75

MaxPar USP 21

General Uses: White Mineral Oil
Chemical Family: Petroleum Hydrocarbon
Responsible Party:

Bigler Specialty Oils, LP
PO Box 2408
Houston, TX 77252
713-864-3303

Emergency Overview
24 Hour Emergency Telephone Numbers:
Spill, Leak, Fire or Accident Call CHEMTREC:
North America: (800) 424-9300
Others: (703) 527-3887 (collect)
California Poison Control System: (800) 356-3129
Health Hazards/Precautionary Measures: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Physical Hazards/Precautionary Measures: Keep away from all sources of ignition.
Appearance: Clear and bright, Water-white
Physical Form: Liquid
Odor: None

NFPA 704 Hazard Class

Health: 0 **Flammability:** 1 **Instability:** 0 ***Legend:*** 0 (Least), 1 (Slight), 2 (Moderate), 3 (High), 4 (Extreme)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Non-Hazardous Components					
Component	**Concentration (wt%)**	**ACGIH**	**OSHA**	**NIOSH**	**Other:**
White Mineral Oil 8042-47-5	100	5 mg/m TWA 10 mg/m STEL	5 mg/m	2500 mg/m IDLH	As Oil Mist, if generated 5 mg/m NOHSC TWA

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.
1%=10,000 PPM.
NE=Not Established

3. HAZARD IDENTIFICATION

Potential Health Effects

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: Contact may cause mild skin irritation including redness, and a burning sensation. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin leading to dermatitis (inflammation). Not acutely toxic by skin absorption, but prolonged or repeated skin contact may be harmful (see Section 11).

Inhalation (Breathing): No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

Ingestion (Swallowing): No harmful effects reported from ingestion.

Signs and Symptoms: Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, nausea and diarrhea.

Cancer: There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

Target Organs: Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

Developmental: No data available for this material.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders.

4. FIRST AID MEASURES

Eye: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

Skin: Wipe material from skin and remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

Inhalation (Breathing): If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion (Swallowing): First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

5. FIRE-FIGHTING MEASURES

Flammable Properties:

Flash Point:	>320°F / 177°C
Test Method:	Cleveland Open Cup (COC), ASTM D92
OSHA Flammability Class:	Not applicable
LEL (vol % in air):	No data
UEL (vol % in air):	No data
Autoignition Temperature:	No data

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.
Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area, keep unauthorized personnel out. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk.

6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release.
Stay upwind and away from spill/release. Notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).
Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

7. HANDLING AND STORAGE

Handling: Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).
Do not wear contaminated clothing or shoes. Use good personal hygiene practices.
"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.
Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.
Storage: Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required.
Personal Protective Equipment (PPE):

Respiratory: A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).
Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Skin: The use of gloves impervious to the specific material handled is advised to prevent skin contact and possible irritation (see manufacturers literature for information on permeability).
Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.
Other Protective Equipment: A source of clean water should be available in the work area for flushing eyes and skin.

Impervious clothing should be worn as needed.
Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Appearance:	Clear and bright, Water-white
Physical Form:	Liquid
Odor:	Mild petroleum
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	<1
Vapor Density (air=1):	>1
Boiling Point/Range:	No data
Melting/Freezing Point:	No data
Solubility in Water:	Insoluble
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.82 – 0.88
Viscosity:	50 SUS@100 – 650SUS @100
Percent Volatile:	Nil
Evaporation Rate (nBuAc=1):	Nil
Flash Point:	>320°F / 177°C
Test Method:	Cleveland Open Cup (COC), ASTM D92
LEL (vol % in air):	No data
UEL (vol % in air):	No data
Autoignition Temperature:	No data
Decomposition Temperature:	No data

10. STABILITY AND REACTIVITY

Stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid: Extended exposure to high temperatures can cause decomposition.
Materials to Avoid (Incompatible Materials): Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products: Combustion can yield carbon, nitrogen, sulfur, phosphorus, and zinc oxides.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Chronic Data:
The petroleum base oils contained in this product have been highly refined by a variety of processes including severe hydrocracking/hydroprocessing to reduce aromatics and improve performance characteristics. All of the oils meet the IP-346 criteria of less than 3 percent PAH's and are not considered carcinogens by NTP, IARC, or OSHA.
Target Organ: Administration of certain mineral hydrocarbon white oils in the diet to Fischer 344 rats at 1500 mg/kg/day for 90 days resulted in the formation of microgranulomas in the liver. However, this response was not observed in studies conducted with other rat strains or dogs. Microgranulomas like those observed in the Fischer 344 rat studies have not been observed in humans.

12. ECOLOGICAL INFORMATION

Lubricant oil basestocks are complex mixtures of hydrocarbons (primarily branched chain alkanes and cycloalkanes) ranging in carbon number from C15 to C50. The aromatic hydrocarbon content of these mixtures varies with the severity of the refining process. White oils have negligible levels of aromatic hydrocarbons, whereas significant proportions are found in unrefined basestocks. Olefins are found only at very low concentrations. Volatilization is not significant after release of lubricating oil basestocks to the environment due to the very low vapor pressure of the hydrocarbon constituents. In water, lubricating oil basestocks will float and will spread at a rate that is viscosity dependent. Water solubilities are very low and dispersion occurs mainly from water movement with adsorption by

sediment being the major fate process. In soil, lubricating oil basestocks show little mobility and adsorption is the predominant physical process.

Both acute and chronic ecotoxicity studies have been conducted on lubricant base oils. Results indicate that the acute aquatic toxicities to fish, Daphnia, Ceriodaphnia and algal species are above 1000 mg/l using either water accommodated fractions or oil in water dispersions. Since lubricant base oils mainly contain hydrocarbons having Carbon numbers in the range C15 to C50, it is predicted that acute toxicity would not be observed with these substances due to low water solubility. Results from chronic toxicity tests show that the no observed effect level (NOEL) usually exceeds 1000 mg/l for lubricant base oils with the overall weight of experimental evidence leading to the conclusion that lubricant base oils do not cause chronic toxicity to fish and invertebrates.

Large volumes spills of lubricant base oils into water will produce a layer of undissolved oil on the water surface that will cause direct physical fouling of organisms and may interfere with surface air exchange resulting in lower levels of dissolved oxygen. Petroleum products have also been associated with causing taint in fish even when the latter are caught in lightly contaminated environments. Highly refined base oils sprayed onto the surface of eggs will result in a failure to hatch.

Extensive experience from laboratory and field trials in a wide range of crops has confirmed that little or no damage is produced as a result of either aerosol exposure or direct application of oil emulsion to the leaves of crop plants. Base oils incorporated into soil have resulted in little or no adverse effects on seed germination and plant growth at contamination rates up to 4%.

13. DISPOSAL CONSIDERATIONS

This material under most intended uses would become used oil due to contamination by physical or chemical impurities. RECYCLE ALL USED OIL. While being recycled, used oil is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste. Under federal regulations, used oil is a solid waste managed under 40 CFR 279. However, in California, used oil is managed as hazardous waste until tested to show it is not hazardous. Consult state and local regulations regarding the proper handling of used oil. In the case of used oil, the intent to discard it may cause the used oil to be regulated as hazardous waste.

Contents should be completely used and containers emptied prior to discard. Rinsate may be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or a drum reconditioner. To assure proper disposal of small empty containers, consult with state and local regulations and disposal authorities.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Shipping Description: Not regulated

Note: Material is unregulated unless shipped by land in a packaging having a capacity of 3,500 gallons or more. Then the provisions of 49 CFR, Part 130 apply.

International Maritime Dangerous Goods (IMDG)

Shipping Description: Not regulated

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

Shipping Description: Not regulated

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health: No

Chronic Health: No

Fire Hazard: No

Pressure Hazard: No

Reactive Hazard: No

CERCLA/SARA - Section 313 and 40 CFR 372:

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

--None Known--

EPA (CERCLA) Reportable Quantity (in pounds):

--None Known--

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:
-- None Known --

California Proposition 65:

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):
-- None Known --

Carcinogen Identification:

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

TSCA:

All components are listed on the TSCA inventory.

International Regulations:

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

Domestic Substances List: Listed

WHMIS Hazard Class:

Not Regulated

International Inventories:

This material is listed on the following inventories:
Australia (AICS)
Canada (DSL)
China
Europe (EINECS)
Korea (Existing and Evaluated Chemical Substances)
Philippines (PICCS)
Japan (ENCS)

16. OTHER INFORMATION

Disclaimer of Expressed and implied Warranties:

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license

Since 1902
ROSS WAXES

Frank B. Ross Co., Inc.
970 H NEW BRUNSWICK AVENUE
RAHWAY, NEW JERSEY 07065
WWW.FRANKBROSS.COM

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24440/11
WAX 1502
611364

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Issue Date: 1/1/2010

Frank B. Ross Co.
970 H New Brunswick Avenue
Rahway, NJ 07065
Information Phone Number: 732-669-0810
Product Name: Ceresine Wax – All Grades
Synonyms/Chemical Name: Petroleum Wax Mixture
Formula: N/A

2. COMPOSITION/INFORMATION ON INGREDIANTS

COMPONENT	CAS NUMBER	PERCENT	EXPOSURE LIMITS
	N/A		See Below

If heated to decomposition, fumes generated may result in respiratory irritation. ACGIH exposure limit for Paraffin Wax fume is TLV-TWA OF 2mg/m3. When finely divided, inhalation of dust may cause irritation Mucous membranes and the respiratory tract. OSHA permissible Exposure limit (PEL-TWA) and ACGIN threshold limit value (TLV-TWA) for respirable dust 5mg/m3. total nuisance dust OSHA PEL-TWA: 15mg/m3; total dust ACGIH TLV-TWA 10mg/m3. Not expected to be a problem under normal condition of use.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White/Yellow waxy solid, practically odorless. Will burn under fire conditions. Vapors and fumes from heated product may cause eye and respiratory irritation. Contact with molten product may cause thermal burns.

POTENTIAL HEALTH EFFECTS

INGESTION: No significant adverse effects are expected. This material has low oral toxicity. It is neither digested nor absorbed but may induce a mild laxative effect.

INHALTION: Vapors and fumes from heated product may cause irritation of the nose, throat and lungs.

EYE: Vapors and fumes from the heated product may cause irritation.

SKIN: Ceresine wax is not considered a skin irritant or a sensitizer. Prolonged or repeated contact may cause discomfort. Contact with heated product may cause thermal burns.

CHRONIC EFFECTS: No adverse effects from chronic exposure are currently known.

CARCINOGENICITY: This product is not listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin conditions such as dermatitis may be aggravated by exposure to this material.

4. FIRST AID MEASURES

EYE: First check victim for contact lenses and remove if present. Flush victim's eyes with large quantities of water and contact a physician if irritation persists.

Since 1902
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Frank B. Ross Co., Inc.
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RAHWAY, NEW JERSEY 07065
WWW.FRANKBROSS.COM
PHONE: 732-669-0810 FAX: 732-669-0814
EMAIL: techinfo@rosswaxes.com

SKIN: Wash thoroughly with soap and water while removing all contaminated clothing. If rash or irritation develops, contact a physician. For contact with molten product, immediately immerse in cold water and maintain in cold water until skin and product are cool. Do not attempt to remove material adhering to the skin. Get immediate medical attention.
INGESTION: Contact your poison control center or emergency department. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth if victim is convulsing or unconscious.
INHALATION: Remove to fresh air. If not breathing use artificial respiration. If breathing is difficult, have qualified personnel administer oxygen. Get medical attention.
NOTE TO PHYSICIAN: Burns from molten wax can be treated as normal, thermal burns.

5. FIRE FIGHTING MEASURES

FLASH POINT: Greater than 375 degrees F COC
FLAMMABLE LIMITS:
LOWER FLAMMABLE LIMIT: Unknown
UPPER FLAMMABLE LIMIT: Unknown
EXTINGUISHING MEDIA: Use carbon dioxide, dry chemical, universal foam or water fog. Cool fire exposed containers and personnel with water.
UNUSUAL FIRE OR EXPLOSION HAZARDS: This product, like all waxes, will burn vigorously under fire conditions.
FIRE-FIGHTING INSTRUCTIONS: Firefighters should use self-contained breathing apparatus and protective clothing.
HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Promptly clean up spills using appropriate protective equipment. If material is in liquid state, absorb with commercially available non-combustible material, such as absorbent clay and collect for disposal. If material is in solid state, scoop or shovel into containers for recovery or disposal.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing vapors and fumes. Avoid prolonged or repeated contact with the skin. Skin contact may be minimized by wearing appropriate gloves (see section 8). Hands and other skin areas should be washed thoroughly with soap and water after handling, especially before eating or smoking. Launder contaminated clothing before reuse.
STORAGE: This material is not hazardous under normal handling and storage conditions. Do not store near high heat or open flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust ventilation as necessary to maintain concentrations below the exposure limit. The ventilation system employed is dependent on the user's specific application of the material. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use and maintenance of ventilation systems.
RESPIRATORY PROTECTION: Not required under normal use conditions. For operations where exposure to fumes above the TLV is possible, wear a NIOSH approved half-face respirator equipped with an organic vapor /HEPA cartridge or a supplied air respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.
SKIN PROTECTION: Chemically resistant gloves such as nitride rubber are recommended to prevent prolonged or repeated contact. Wear insulated gloves for handling hot material.

EYE PROTECTION: Wear safety glasses or chemical safety goggles if contact with eyes is possible.

OTHER: Heat protective clothing as needed for handling hot material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White to Yellow Solid
ODOR: Slight Petroleum Odor
PHYSICAL STATE: Solid (at 70 degrees F, 14.7 PSIA)
BOILING POINT: N/A
VAPOR PRESSURE: NIL
VAPOR DENSITY: N/A
SOLUBILITY IN WATER: NIL
Ph: N/A
MELTING POINT: 130-198 degrees F
OCTANOL/WATER COEFFICIENT: N/A
SPECIFIC GRAVITY: 0.880/0.935
VISCOSITY: Varies

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage and handling conditions
CONDITIONS TO AVOID: High temperatures and open flames
INCOMPATIBILITY: Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition may emit oxides of carbon.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

This product is biologically inert and therefore not systemically toxic. No specific toxicity data is available.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No ecological data is available. This product is not expected to present any environmental hazard in normal use or disposal.
CHEMICAL FATE: No data found

13. DISPOSAL CONSIDERATIONS

Incinerate material at a permitted facility in accordance with current local, state and federal regulations. Alternatively, place material into containers suitable for disposal and bury in an approved landfill in accordance with current local, state and federal regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in the MSDS incomplete, inaccurate or otherwise inappropriate.

14. TRANSPORTATION INFORMATION

TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION:
Not regulated as hazardous for transportation when shipped at ambient temperature.

15. REGULATORY INFORMATION

Since 1902
ROSS WAXES

Frank B. Ross Co., Inc.
970 H NEW BRUNSWICK AVENUE
RAHWAY, NEW JERSEY 07065
WWW.FRANKBROSS.COM

PHONE: 732-669-0810 FAX: 732-669-0814

EMAIL: techinfo@rosswaxes.com

U.S. REGULATIONS
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). None known.

CERCLA 103 REPORTABLE QUANTITY: This product is not subject to CERCLA release reporting requirements. Many states have more stringent reporting requirements. Report spills and other releases as required under federal, state and local regulations.

SARA TITLE III:
Hazard Category for Section 311/312: No reporting requirements
Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: **NONE**
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
CALIFORNIA PROPOSITION 65: This product contains the following substances know to the State of California to cause cancer and/or reproductive harm: **NONE**

16. OTHER INFORMATION

NFPA RATING:	Health=0	Fire=1	Reactivity=0
HMIS RATING:	Health=0	Fire=1	Reactivity=0

This information is, to the best of Frank B. Ross Company's knowledge and belief, accurate and reliable. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. FOR FURTHER INFORMATION CALL (732) 669-0810.

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[illegible] will not be automatically updated.
[illegible] are not authorized for use by CRODA INC.

CRODA

Croda Inc.
300-A Columbus Circle
Edison, NJ 08837

MATERIAL SAFETY DATA SHEET

(Conforms to OSHA Regulations – 29 CFR 1910.1200)

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: **SUPER HARTOLAN 6105 (pastilles)**

Product Code: LD04817

Chemical Family: Fatty Alcohols

Chemical Name: Lanolin Alcohol

International Nomenclature Cosmetic Ingredient (INCI) Name: Lanolin Alcohol

EMERGENCY TELEPHONE NUMBER: **CHEMTREC: 1-800-424-9300**

NON-EMERGENCY PRODUCT INFORMATION:

CRODA INC.
NORTH AMERICAN HEADQUARTERS & INNOVATION CENTER
300-A COLUMBUS CIRCLE
EDISON, NJ 08837-3907
TEL: 732-417-0800 FAX: 732-417-0804

SECTION 2 – COMPOSITION AND INGREDIENT INFORMATION

Ingredient	CAS number	REACH Status	Exposure limit
Lanolin Alcohol	8027-33-6	Pre-registered	Not established

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SECTION 3 – HAZARDOUS IDENTIFICATION

This material is non-hazardous as defined by the OSHA Hazard Communication Standard.

SECTION 4 – FIRST-AID MEASURES

Skin:	Wash with soap and water.
Eyes:	Flush with water for at least 15 minutes. If irritation develops, get medical attention.
Ingested:	Get medical attention. Do not induce vomiting.

SECTION 5 – FIRE FIGHTING PROCEDURES

Flammable - LEL: NA Flammable - UEL: NA

Extinguishing Medium:	Dry chemical, carbon dioxide, foam or water spray.
Special Fire Fighting Procedure:	Wear self-contained breathing apparatus and other protective clothing. Will float on water - Treat as grease fire. If water must be used, use fog nozzle to prevent spread of burning liquid.
Unusual Fire Explosion Hazards:	None known.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up with inert absorbent material and place into a separate waste container.. Flush the area with warm water.No reportable quantity for this material has been established per 40 CFR parts 302 or 355.

SECTION 7 - HANDLING AND STORAGE

Ambient warehouse conditions.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation Requirements: Normal ventilation adequate.

Recommended Personal Protective Equipment:

Respiratory:	Not required.
Eyes:	Safety glasses.
Hands:	Impervious gloves.
Other:	Not required.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Not available.	Flash Point:	>100C
Vapor Density:	Not available.	Vapor Pressure:	Not available.
Specific Gravity:	Not available.	Evaporation Rate:	Not available.
Solubility:	Insoluble in water	Melting Point:	Not available.
Appearance:	Waxy yellow solid	pH:	Not available.
Odor:	Characteristic		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable.
Conditions to avoid:	None known.
Hazardous decomposition:	Oxides of carbon.
Incompatibility (Materials to avoid):	Strong oxidizing agents.
Hazardous polymerization:	Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute oral toxicity:	LD50 (rat) > 20 ml/kg (50% conc)
Dermal toxicity:	Not Available
Dermal irritancy:	Draize Test (rabbit)- mild skin irritation. Patch test on human volunteers did not demonstrate irritation or sensitization properties.
Occular irritancy:	Draize Test (rabbit)- mild eye irritation.
Notes:	Information based on testing completed on similar product.

SECTION 12 - ECOLOGICAL INFORMATION

No data available

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SECTION 13 - DISPOSAL CONSIDERATIONS

This material is not a listed or characteristic RCRA hazardous waste per 40 CFR 261.
Dispose of in accordance with local, state, and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Hazardous or non-hazardous: Non-hazardous.

Proper Shipping Name: Not regulated by DOT.

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL CHEMICAL INVENTORY STATUS:

UNITED STATES TOXIC SUBSTANCES CONTROL ACT (TSCA):	Not evaluated*
EUROPEAN INVENTORY OF NEW AND EXISTING CHEMICAL SUBSTANCES (EINECS):	Listed
AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS):	Listed
CANADIAN DOMESTIC / NON-DOMESTIC SUBSTANCE LISTS:	DSL

SARA 312: No reportable components.

SARA 313: No reportable components.

Canadian WHMIS: No reportable components.

California Proposition 65: No reportable components.

SECTION 16 - OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS):

Health: 0 Fire: 1 Reactivity: 0 PPE Code: B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health: 0 Fire: 1 Reactivity: 0 Additional Information: (none)

NON-WARRANTY: ALL INFORMATION CONTAINED HEREON IS INTENDED PRIMARILY TO DEMONSTRATE THE UTILITY OF CRODA PRODUCTS. WE ASSUME NO LIABILITY IN THE PRESENTATION OF THIS DATA, NOR SHOULD THE INFORMATION BE CONSTRUED AS GRANTING LICENSE TO PRACTICE ANY METHODS OR COMPOSITIONS OF MATTER COVERED BY U.S. OR FOREIGN PATENTS.
THE DATA SUPPLIED IN THIS MSDS RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATIONS WITH ANY OTHER MATERIALS OR IN ANY PROCESS. THE INFORMATION IS SUPPLIED IN GOOD FAITH AND BASED ON TECHNICAL DATA WHICH CRODA BELIEVES TO BE RELIABLE AND ACCURATE. NO WARRANTY EITHER EXPRESS OR IMPLIED IS MADE.

Procter & Gamble Chemicals

MATERIAL SAFETY DATA SHEET

MSDS Number: GLYC302-2
Supersedes: GLYC302-1

Revision Date: April 26, 2004
Issue Date: July 20, 2002

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- **Product identification**

Synonyms: Glycerol
Trade Names: **Superol V Glycerine USP, FCC**

- **Product uses**
Multiple uses including as emulsifier, emollient, plasticizer, humectant, sweetner, anti-freeze, in surface coatings and paints, cosmetics, drug and food products. Intermediate for making glycerol derivatives.

- **Company/undertaking identification**

North America:
The Procter & Gamble Company
Procter & Gamble Chemicals
Sharon Woods Technical Center
11530 Reed Hartman Highway
Cincinnati, Ohio 45241

Department issuing MSDS: Product Safety and Regulatory Affairs
1-800-477-8899

Europe:
Procter & Gamble European Supply Company N.V.
P&G Chemicals – Europe
The Heights
Brooklands
Weybridge
Surrey
ENGLAND KT13 0XP
Telephone Number: 01932-896000

- **Emergency Telephone:**

P&G Ltd. - Brooklands, England: Tel 01932-896000 (day phone)
Emergency 0191-279-2000 (day phone)

CHEMTREC: 1-800-424-9300 U.S. and Canada
1-703-527-3887 For calls originating elsewhere

U.S. Emergency, Quality or Service Issues: Call Customer Service
1-800-477-8899 or 513-626-6882

5. FIRE FIGHTING MEASURES - CONTINUED

- Flash Point and method: >390° F (198.9° C) PMCC
- Explosive limits in air: Not applicable
- Auto-ignition temperature: ~752° F (~400° C)
- Sensitivity to mechanical impact/static discharge: Not available
- Special Protective Equipment: Wear self-contained breathing apparatus and full protective clothing.
- Other Fire Fighting Considerations: Contact of glycerine with strong oxidizing agents such as Nitric Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.
- Exposure hazards: During burning poisonous acrolein may be formed.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions: Wear respirator, suitable gloves and eye/face protection.
- Environmental Precautions: Minimize contamination of drains, surface and ground waters.
- Procedures for Spill/Leak Clean-up: Transfer product to suitably labeled containers for disposal at an approved site. Absorb liquid spillage onto inert material (e.g. sand). Residues and small spillages may be washed away with water and detergent.

Refer to Section 8 for additional personal protection information.
Refer to Section 13 for disposal considerations.

7. HANDLING AND STORAGE

- Handling: No special precautions required, but avoid eye and skin contact as part of normal industrial hygiene. Prevent formation of mist. Eye and skin contact should be avoided if handling at elevated temperatures.
- Storage: Store in clean tight containers to prevent moisture pickup from air. Can be stored in aluminum, stainless steel, fiberglass or resin lined steel vessels.
- Other Recommendations: Avoid contact with strong oxidizing agents such as Nitric Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate.
- Specific use(s): Follow bulk handling and storage procedures as noted above.

Refer to Section 6 for clean-up of spillages.
Refer to Section 13 for disposal considerations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- General Precautions: Good industrial hygiene should be followed. Avoid breathing mist.

- Exposure Limit Values - glycerine:

Australia – TWA 10 mg/m^3
Belgium - TWA 10 mg/m^3
Canada:
  Alberta – TWA 10 mg/m^3
  British Columbia – TWA 10 mg/m^3
  Ontario – TWA 10 mg/m^3
  Quebec – TWA 10 mg/m^3
France – TWA (VME) 10 mg/m^3
Finland – 8 hour limit 20 mg/m^3
Ireland – 8 hour OEL (TWA) 10 mg/m^3
Italy – 8 hour TWA 10 mg/m^3
Korea – TWA 10 mg/m^3
Malaysia – TWA 10 mg/m^3
Mexico – TWA 10 mg/m^3
New Zealand – TWA 10 mg/m^3
Singapore – 8-hour PEL (TWA) 10 mg/m^3
Spain – 8 hour daily exposure limit (VLA-ED) 10 mg/m^3
The Netherlands – MAC TWA (TGG) 10 mg/m^3
United Kingdom – TWA 10 mg/m^3
United States – ACGIH – Glycerine mist - TLV-TWA 10 mg/m^3
  OSHA Z-1 PEL Glycerine mist, respirable fraction - 5 mg/m^3
  OSHA Z-1 PEL Glycerine mist, total dust - 15 mg/m^3

- Exposure Controls:

Engineering Controls: Ventilation: Local exhaust - preferred
Mechanical (general) acceptable
Provide ventilation to meet exposure limits.

Personal Protective Equipment:

Eye - None required, although eye protection is recommended as part of good industrial hygiene.

Skin - Protective gloves: None required with normal use.

Inhalation - An appropriate NIOSH/MSHA approved respirator should be used if a mist or vapor is generated. A NIOSH/MSHA approved self-contained breathing apparatus or air-supplied respirator is recommended if the concentration exceeds the capacity of cartridge respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Other Controls: None required.

- Environmental Exposure Controls: Contact Procter and Gamble for specific Community information.

9. PHYSICAL AND CHEMICAL PROPERTIES

- General Information:

Physical State: Liquid
Appearance: Water white, clear
Odor: Bland odor; sweet taste
Odor Threshold: Not available

- Important health, safety and environmental information:

pH: Neutral
Boiling point/Boiling range: > 550° F (288° C) @ 760 mm Hg (101.3kPa)
Flash Point & Method: >390° F (198.9° C) PMCC
Flammability (solid, gas): Not available
Explosive properties: Not to be expected
Oxidising properties: Not to be expected
Vapor pressure: @ 68° F (20° C) <0.008 mm Hg (<1013 hPa)
Relative density: 1.262 @ 25/25° C
Freezing point: Not available
Melting Point: ~64.4° F (~18° C) (solidifies at a much lower temperature)
Solubility:
Water solubility: Complete @ 72° F
Fat solubility (solvent-oil to be specified): Miscible with ethanol
Slightly soluble in acetone
Insoluble in ether and in chloroform

Partition coefficient (Log Pow) (calculated): -2.6
Viscosity: ~1300 mPa.s at 20° C
Vapor density: Not available
Evaporation Rate (nBuOAc=1): Not available
Explosive Limits: Not applicable
Auto ignition temperature: ~752° F (~400° C)
Coefficient of water/oil distribution: Not available

10. STABILITY AND REACTIVITY

- Stability: Stable under normal operational procedures.
- Conditions to Avoid: None identified.
- Materials to Avoid: Contact of glycerine with strong oxidizing agents such as Nitric Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.
- Hazardous Decomposition Products: Does not decompose up to 204° C (400° F) Thermal decomposition may release acrolein.
- Hazardous Polymerization: No hazardous polymerization reactions.

11. TOXICOLOGICAL INFORMATION

IRRITATION DATA

Skin, rabbit	Not irritating
Eye, rabbit	Not irritating

TOXICITY DATA

LD_{50} oral, rat	>2 g/kg

12. ECOLOGICAL INFORMATION

- Ecotoxicity:

Carassius auratus (Goldfish)	24h LC_{50} >5,000 mg/L
Leuciscus idus (Golden Orfe)	48h LC_0 >250 mg/L
Oncorhynchus mykiss (Rainbow trout)	96h LC_{100} = 51,000 – 57,000 mg/L
Daphnia magna	24h EC_{50} >10,000 mg/L
Daphnia magna	24h EC_0 >500 mg/L

Microorganisms

Chlimonas paramaecium	48h NOEC >10,000 mg/L
Entosiphon sulcatum	72h NOEC 3200 mg/L
Pseudomonas putida	16h NOEC >10,000 mg/L
Uronema parduzci	20h NOEC >10,000 mg/L

Algae

Microcystis aeruginosa	8d NOEC 2900 mg/L
Scenedesmus quadricauda	8d EC0 >10,000 mg/L

- Mobility:
  Low potential for sorption to soil. Glycerol will partition primarily to water.

- Persistance and degradability:
  Readily biodegradable (OECD 301)

- Bioaccumulative potential:
  BCF: 3.162 (calculated)

13. DISPOSAL CONSIDERATIONS

DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Do not dispose of via sinks, drains or into the immediate environment.

14. TRANSPORT INFORMATION

U.S. DOT: Not regulated for transport
Not classified in RID/ADR – IMDG – ICAO/IATA

15. ADDITIONAL REGULATORY INFORMATION

INVENTORY STATUS: TSCA, EINECS, DSL, JAPAN, AUSTR, PHIL, CHINA, KOREA

WGK water endangering class: 1, low hazard to water

EU Classification

This product is not classified as dangerous according to Directive 67/548/EEC.

Canada

HAZARDOUS INGREDIENTS – WHMIS (Canadian Workplace Hazardous Materials Information System)

This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act.

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

---

16. OTHER INFORMATION

EUROPE

This product safety data sheet was prepared in compliance with Directive 2001/58/EC

References: BIBRA toxicity profile (1987). Glycerol.

OECD SIDS Initial Assessment Report for SIAM 14, February 2002

The following sections contain revisions or new statements: 1.

Department issuing MSDS: Product Safety and Regulatory Affairs 1-800-477-8899

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material or any other process. Procter & Gamble assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

MEDALLION INTERNATIONAL, INC.
233 West Parkway
Pompton Plains, NJ 07444 USA

FOR CHEMICAL EMERGENCY CALL INFOTRAC: 800-535-5053

HMIS CLASSIFICATION		
Health	1	0 = least
Fire	2	1 = slight
Reactivity	0	2 = moderate
Personal Protection: D		3 = high
		4 = extreme

MATERIAL SAFETY DATA SHEET

SECTION I - IDENTIFICATION AND GENERAL INFORMATION

PRODUCT NAME: LAVENDER OIL

CAS #8000-28-0
FEMA #2622

SECTION II - HAZARDOUS INGREDIENTS

CONTAINS: SARA TITLE III - This product does not contain any Toxic Chemicals subject to the reporting requirements of Section 313 40 CFR Part 372.

SECTION III - PHYSICAL DATA

BOILING POINT:(Deg.F): N.F.
MELTING POINT (Deg.F): N.F.
SPECIFIC GRAVITY: @25 C .876 - .892
SOLUBILITY IN WATER: Insoluble
APPEARANCE: Pale yellow to amber liquid.

FLASH POINT: 154°F
VAPOR DENSITY: N.F.
%VOLATILES: 100%

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA: WATER FOAM x CO_2 x DRY CHEMICAL x
SPECIAL FIRE FIGHTING PROCEDURES: N.F.
UNUSUAL FIRE AND EXPLOSION HAZARDS: N.F.
HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide and/or smoke.
DEPARTMENT OF TRANSPORTATION HAZARD CLASSIFICATION: Non-Hazardous, Non-Restricted.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (ACGIH TLV): N.F.
THRESHOLD LIMIT VALUE (OSHA PEL): N.F.
CARCINOGENICITY: NTP MONOGRAPH: N.F. IARC MONOGRAPH: N.F.

ACUTE TOXICITY DATA:
ORAL LD50: >5 g/kg. (Rat)
INHALATION LD50: N.F.
DERMAL LD50: >5 g/kg. (Rabbit)

HEALTH HAZARDS (ACUTE AND CHRONIC):
INGESTION: N.F.
INHALATION: Vapors may by irritating.
SKIN CONTACT: Liquid may be irritating.
IRRITATION (EYE): Liquid may be irritating.

OTHER EFFECTS:
INGESTION: Liquid may be irritating to mouth and throat.
INHALATION: Vapors may be irritating to nose, throat and mucous membranes.

Continued on page 2

LAVENDER OIL

continued from page 1

SKIN CONTACT: Liquid may be irritating to skin.
EYE CONTACT: Liquid may be irritating to eyes.

SECTION VI - EMERGENCY FIRST AID PROCEDURES

EYE CONTACT: Remove contact lenses. Flush immediately with cold clean water for at least 15 minutes. Contact a physician immediately.
SKIN CONTACT: The affected area should be thoroughly washed with soap and water. Flush with large quantities of water. If irritation persists, contact a physician.
INHALATION: Remove to fresh air and contact a physician if necessary.
INGESTION: Administer water or milk to dilute. Contact a physician or local poison control center immediately.

SECTION VII - REACTIVITY DATA

This material presents no significant reactivity hazard.
Hazardous polymerization will not occur and it will not react violently with water.
Contact with highly reactive chemical oxidants should be avoided.
If burned this product will produce carbon monoxide and/or carbon dioxide.

SECTION VIII - PERSONAL PROTECTION

EYES: The use of goggles or a face shield is recommended.
RESPIRATORY: Respiratory protection is normally not required in well ventilated areas however, NIOSH approved respiratory protection may be required when the material is rated toxic by inhalation or if the material is to be used in a confined area.
OTHER PROTECTIVE EQUIPMENT: Chemical resistant gloves are recommended.
VENTILATION: Ventilation meeting ACGIH standards should be employed.
WORK/HYGIENIC PRACTICES: Use good, personal hygienic practices. Limit exposure to product whenever possible. Wash after any contact. Thoroughly wash any contaminated clothing or shoes before reuse.

SECTION IX - SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Remove any sources of flame or sparks. If in a confined area NIOSH approved respiratory protection may be required.
Absorb spills on vermiculite or other suitable absorbent material and remove to an approved disposal container.
Dispose of in accordance with current state, local and federal laws and regulations.

SECTION X - STORAGE AND HANDLING

Store in full tight containers in a cool dry place, away from light.

The information contained herein is based on data considered accurate and reliable: Nevertheless, you should perform your own investigation and independent verification. No warranty is expressed or implied regarding the accuracy or correctness of these data. Since the use of this information and the conditions of use of product are not within the control of Medallion International, Inc., it is the user's obligation to determine the condition of safe use of the product.

N.F. = Not Found
N.A. = Not Applicable
11/11/03 revised

Printed 8/25/11

MATERIAL SAFETY DATA SHEET

SENSIENT
COSMETIC TECHNOLOGIES

Issue Date : 20 Jun., 2007
Revision Date : 05 Mar., 2010

CHEMTREC – 24 hr Emergency Telephone
1-800-424-9300

SECTION 1 – PRODUCT/COMPANY IDENTIFICATION

PRODUCT CODE & DESCRIPTION: FD&C BLUE 1, 05601

UTILIZATION: Cosmetic Ingredient

MANUFACTURER:

SENSIENT COSMETIC TECHNOLOGIES - FRANCE
7 Rue de l'Industrie
95310 Saint-Ouen L'Aumone, France
Phone: (0) 1-34-48-57-00
Fax: (0) 1-34-64-44-40

SENSIENT COSMETIC TECHNOLOGIES - USA
107 Wade Avenue
South Plainfield, NJ 07080-1311
Phone: 800-543-4524
Fax: 908-222-3851

SECTION II – COMPOSITION / INFORMATION ON THE INGREDIENTS

Non-Hazardous:

Chemical Name	*CAS No.*	*EINECS No.*	*%*
FD&C Blue No. 1	*3844-45-9*	*223-339-8*	*100*

SECTION III – HAZARDS IDENTIFICATION

Health	0
Fire	1
Reactivity	0

- Dust may be irritating to skin. No adverse effects expected
- Dust may be irritating to eyes, will not lead to permanent damage to eye tissue.
- Dust may be irritating to lungs and cause sneezing. See section 8.
- Ingestion may cause nausea and vomiting

SECTION IV – FIRST AID MEASURES

GENERAL : No Special Measures Are Required.
Eyes : Flush eyes thoroughly with water for at least 15 minutes. If discomfort persists obtain medical assistance.
Skin : Wash affected water with soap and water and rinse thoroughly.
Ingestion : Non-hazardous. If a large amount is ingested or if discomfort persists, obtain medical assistance.
Inhalation : Remove to fresh air. If discomfort persists, obtain medical assistance.

SECTION V – FIRE FIGHTING MEASURES

Flash Point : N/A Method Used : N/A
Flammable Limits Lower : N/A Upper : N.A
Extinguishing Media: Water Fog : [x] Alcohol Foam : [x] CO2 : [x] Dry Chemical : [x]
Unusual Fire & Explosion Hazards : Finely divided powder may lead to dust cloud formation.
Fire-Fighting Equipment : Self-contained breathing apparatus and full protective equipment.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Protection : Wear protective clothing
Action to Take for Spills/Leaks : Sweep up and collect in appropriate containers until ready for disposal.
: Wash spill area with soapy water until all apparent color is removed.
Environmental Protection : Do not allow product to reach sewage system or any water course.
: Inform authorities in case of seepage into water course or sewage system.

SECTION VII – HANDLING AND STORAGE

Information for Safe Handling : Store in cool, dry place, in tightly closed receptacles.
: Ensure good ventilation in the work place
: Open and handle receptacles with care
: Avoid generating dust.
: Wear suitable respiratory protective device when decanting large quantities.
: Wash thoroughly after handling.

Fire and Explosion Protection : Avoid electrostatic discharges.

Storage : 10 years if above recommendations are followed.
: Store only in unopened receptacles.
: Store in a well ventilated area.
: Protect from water and excessive humidity.

SECTION VIII – EXPOSURE CONTROL and PERSONAL PROTECTION

- Ventilation : Provide sufficient ventilation to maintain concentrations below TLV.
- Respiratory Protection : Use a face mask/respirator approved for mineral dusts by NIOSH.
- Skin Protection : Normal protective clothing and gloves.
- Eye Protection : Wear safety glasses or goggles.

SECTION IX – PHYSICAL and CHEMICAL PROPERTIES

- Appearance : Powder
- Color : Blue (sol'n in water)
- pH : N/A
- Specific Gravity : N/A
- Decomposition : 230C.

- Solubility In / Miscible with:

- Water	Soluble (20% max. @ 25°C.)
- Vegetable Oil	Insoluble
- Paraffin Oil	Insoluble

SECTION X – STABILITY and REACTIVITY

- Chemical Stability : Stable under normal conditions.
- Conditions to Avoid : Heat, flame & sparks. Avoid dust formation.
- Incompatible Materials : None known to manufacturer.
- Hazardous Decomposition Products : None under normal conditions. Material is non-combustible.
- Hazardous Reaction : Will not occur under normal processing.

SECTION XI - TOXICOLOGICAL INFORMATION

- Eye Contact : non-hazardous. Slight irritant*. May cause temporary discomfort.
- Skin Contact : non hazardous. Moderate irritant* to skin and mucous membranes.
- Ingestion : Non-hazardous. Obtain medical assistance.
- Inhalation : Nuisance dust. May cause physical discomfort to the respiratory tract.
- Overexposure : Obtain medical assistance.

Additional Information : * Opinion of SCCNFP – Colipa n° C40 / FDA-EEC-Japan : positive lists

SECTION XII – ECOLOGICAL INFORMATION

- General Notes : The product should not be released into the aquatic environment without preliminary treatments (purification plant).

  : At present there are no ecotoxicological assessments.

SECTION XIII – DISPOSAL CONSIDERATION

- Disposal of the product : Dispose of in accordance with Federal, State and Local regulations.
  : Must not be disposed of together with household garbage.
  : Do not allow to reach sewage system
  : S-29 – Do not empty into drains.

- Disposal of containers : Do not remove labels before cleaning.
  : Do not cut or pierce the containers.
  : Containers should be cleaned by appropriate measures before reuse.
  : Send to disposal or incinerator as appropriate.

SECTION XIV – TRANSPORT INFORMATION

- Land Transport ADR/RID (cross border) : not classified as hazardous
- Maritime Transport IMDG : not classified as hazardous
- Air Transport ICAO-TI and IATA-DGR : not classified as hazardous

SECTION XV – REGULATORY INFORMATION

- International Inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS
BLUE No. 1 (FD&C)	X	X	-	X	-	X	X	X	X	X

- Labeling according to EU guidelines : "Not subject to identification regulations under EU directives and the Ordinance on Hazardous Materials (German GefStoffV)."
- Safety phrases : S-29 Do not empty into drains.

SECTION XVI – ADDITIONAL INFORMATION

The information herein is given in good faith, but no warranty, expressed or implied, is made. For additional information, please contact Sensient Cosmetic Technologies.

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