

Product name: MULTIWAX® W-445 Microcrystalline Wax

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: MULTIWAX® W-445 Microcrystalline Wax

Chemical name: Wax

Supplier: Sonneborn, Inc.
575 Corporate Drive, Suite 415
Mahwah, NJ 07430 USA

Emergency telephone number: CHEMTREC (24 hours) 800-424-9300
Sonneborn, Inc. Emergency Response
(24 hours) 724-756-2210

For MSDS, Product Safety, or regulatory inquiries, call: 877-948-2688

Customer Service: 877-948-2688

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS#	CONCENTRATION
Microcrystalline Wax	63231-60-7	100.0 %
2,6-Di-tert-butyl-p-cresol	128-37-0	< 10.0 PPM

Note(s): This is not a dangerous substance

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

THIS PRODUCT IS AN NF GRADE WAX. IT IS NOT EXPECTED TO PRESENT ANY UNUSUAL HAZARDS, IN PROPER USE.

THIS PRODUCT IS OFTEN TRANSPORTED AND HANDLED HOT. CARE SHOULD BE TAKEN TO PREVENT THERMAL BURNS.

4. FIRST AID MEASURES

Swallowing

Treat symptomatically. Not expected to be toxic by ingestion. WHEN MOLTEN ONLY (molten product can cause thermal burns) -

Skin

No emergency care anticipated. Wash skin with soap and water. Remove contaminated clothing. Wash clothing

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before re-use. Obtain medical attention if irritation persists. WHEN MOLTEN ONLY (molten product can cause thermal burns) - If burned by contact with hot molten material, cool burned skin as quickly as possible by immersing in cold water, or applying cold water. Call a physician.

Inhalation

Obtain medical attention. Oxygen may be given by qualified personnel if breathing is difficult or cyanosis (blue discoloration of skin) is noted. Give artificial respiration if not breathing. Remove to fresh air if aerosol spray is inhaled. Aspiration may cause pulmonary edema or aspiration pneumonia. Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur. WHEN MOLTEN ONLY (molten product can cause thermal burns) -

Eye contact

No emergency care anticipated. Flush eyes thoroughly with water for several minutes. Obtain medical attention if discomfort persists. WHEN MOLTEN ONLY (molten product can cause thermal burns) -

5. FIRE-FIGHTING MEASURES

Flash point:	> 210 °C	(400 °F)
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NFPA CLASSIFICATION

Health: 0	Flammability: 1	Reactivity: 0	Special provisions: -
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Special fire fighting procedures

Use water spray to cool fire-exposed containers and structures. Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear. Self-contained breathing apparatus with full face-piece operated in positive pressure mode.

Extinguishing media

Suitable: Treat as an oil fire.
Small fires:
- CO2
- dry powder
- foam
Large fires:
- alcohol-type foam or universal-type foams
- water fog

Unsuitable: Oil will float on water and can spread any fire.

Unusual fire and explosion hazards

This product will burn if involved in a fire. This product will float upon water, so water spray is not a suitable extinguishing agent as it may cause any fire to spread.

6. ACCIDENTAL RELEASE MEASURES

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Personal precautions

Eliminate sources of ignition. Use heat protective equipment (such as gloves, long sleeves, and aprons) when handling molten material.

Environmental precautions

This product is insoluble in water and will float on the surface. Prevent from entering sewers or drains. Should this product enter sewers or drains, it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.

Methods for cleaning up

Floor may be slippery; use care to avoid falling.

Small spills Cover remaining spilled product with dry powder, dry sand, or Vermiculite.

Large spills After cooling solidification, scrape and/or shovel material.
Large spill: Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.
Stop leak, if without risk.

7. HANDLING AND STORAGE

HANDLING**Handling precautions**

Never use pressure to empty drums. Keep drums tightly closed to prevent contamination. Residual vapors may explode on ignition; do not puncture, drill, grind, or weld near this container. Electrically bond and ground all containers and equipment before transfer or use of material.

STORAGE**Storage requirements**

Normal precautions common to safe manufacturing practice should be followed in handling and storage. Store in a dry place. Keep container tightly closed. Keep out of strong sunlight. Do not store at temperatures: >+90 °C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION**Respiratory protection**

If vapor and/or mist is generated by heating, spraying, etc., wear an organic vapor respirator with a mist filter. No special respiratory protection is normally required.

Hand protection / protective gloves

Wear oil resistant gloves.

Heat protective impervious gloves when handling molten product.

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Face shield or chemical splash goggles in case of splashing.

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

Coveralls when handling molten product.

Industrial hygiene measures

Remove contaminated clothing and clean it.

Do not eat or drink at work.

ENGINEERING CONTROLS**Ventilation**

Local ventilation is needed in the presence of airborne mists.

EXPOSURE LIMITS

<u>Component</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Mineral Oil Mist	TWA (mist), ACGIH	5.0 mg/m ³	If used in way that generates a "mist" observe the limits for Mineral Oil Mist.
	STEL (mist), ACGIH	10.0 mg/m ³	
<u>Component</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
2,6-Di-tert-butyl-p-cresol	TLV-TWA, ACGIH	2.0 mg/m ³	

9. PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE**

Physical state	Solid
Color	White to yellow
Odor	None

OTHER PROPERTIES

Boiling point	No data available.
Melting point	54 - 102 °C at STP unless specified below.
Specific gravity (H₂O=1)	< 1
Vapor pressure	< 0.005 hPa (0.00 mmHg) at 20 °C
Solubility in water	Insoluble
Solubility in organic solvents	Soluble
Partitioning coefficient	log POW: > 6

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This product is soluble in oil.

Flash point

> 210 °C (400 °F)

Method: Cleveland open cup ASTM D 92

Percent volatiles

Nil

10. STABILITY AND REACTIVITY

Stability: Stable.

Incompatible materials

Normally unreactive; however avoid contact with:

Strong oxidizing agents.

Sunlight or ultraviolet light.

Heat or high temperature.

Hazardous combustion products

Burning can produce the following combustion products:

Oxides of carbon.

Soot

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Acute effects

Ingestion is unlikely to have any toxic effects but the product may act as an intestinal lubricant and result in diarrhea and frequent loose stools.

SKIN ABSORPTION

Acute effects

Harmful effects are not expected from short periods of contact.

INHALATION

Acute effects

Harmful effects are not expected from static vapor at ambient temperature.

Inhalation of mist or spray may be harmful.

Chronic effects

Aspiration may cause pulmonary edema or aspiration pneumonia.

Oil deposits in the lung may lead to fibrosis and reduced pulmonary function.

Prolonged or repeated inhalation of excessive amounts of oil mist or vapors may cause irritation of the respiratory tract.

SKIN CONTACT

Acute effects

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No evidence of harmful effects from available information.

EYE CONTACT

Acute effects

No evidence of harmful effects from available information.

12. ECOLOGICAL INFORMATION

This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant. Not expected to be acutely toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

General: Incineration is probably the best means of disposal. Dispose of in accordance with appropriate Federal, State, and local regulations.

14. TRANSPORT INFORMATION

DOT Classification

Not regulated if shipped or transported at temperatures under 100°C (212 °F) or in containers less than 450 liter. If shipped at temperatures ≥ 100 °C (212 °F) and in containers ≥ 450 liters (119 US gal), this product is regulated as: ELEVATED TEMPERATURE LIQUID, N.O.S., Class 9, UN 3257, PGIII, ERG 128.

Freight description road: 65 PETROLEUM OIL, N.O.I.B.N

IMDG Classification

Not regulated if shipped or transported at temperatures under 100°C (212 °F) or in containers less than 450 liter.

ICAO Classification

This product is not regulated by ICAO @ <100 °C

FORBIDDEN BY AIR @ ≥ 100 °C

15. REGULATORY INFORMATION

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name
Microcrystalline Wax

CAS#
63231-60-7

New Jersey TS Number

EPA Hazard Categories (SARA 311, 312): None

Product name: MULTIWAX® W-445 Microcrystalline Wax**CHEMICAL INVENTORY**

<u>Canada:</u>	The ingredients of this product are on the DSL.
<u>Europe:</u>	The ingredients of this product are on the EINECS inventory.
<u>United States:</u>	The ingredients of this product are on the TSCA inventory.
<u>Australia:</u>	The ingredients of this product are on the AICS inventory.
<u>Japan:</u>	The ingredients of this product are on the ENCS inventory.

FDA**Food additive**

This product is an NF grade Wax which is used for a variety of applications such as food grade lubricants and in the production of cosmetics and pharmaceuticals. It meets the requirements of the US FDA as per 21 CFR 172.886 and 21 CFR 178.3710.

16. OTHER INFORMATION**FURTHER INFORMATION**

MAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST.

HMIS RATING

Health: 0	Flammability: 1	Reactivity: 0	PPI: -
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LEGEND

STP	Standard temperature and pressure
W/W	Weight/Weight
0 (HMIS)	Minimal hazard
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

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The opinions expressed herein are those of qualified experts within Sonneborn Inc.. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Sonneborn Inc., it is the user's obligation to determine the conditions of safe use of the products.