MATERIAL SAFETY DATA SHEET
SDS/MSDS

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

CERESIN WAX (WHITE)

OTHER NAMES

"earth fume", "mineral wax", cerin, cerosin

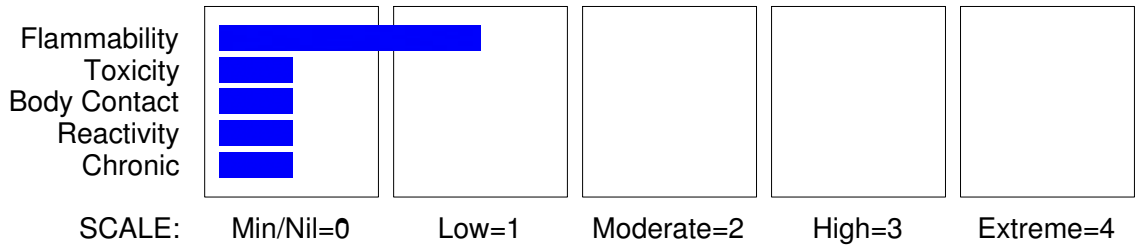
PRODUCT USE

Bees wax substitute, candle wax, manufacture of waxed papers and cloth, polishes, electrical insulators, water-proof fabrics. Used to manufacture hydrofluoric acid bottles. Also used in dentistry for impression and inlay waxes and modelling compounds.

SUPPLIER

Company: Bio-Chem Chemicals
Address:
5455 NicholsonRoad, Science Market
Ambala Cantt, 133001 - Haryana
+91 82952 41953
info@biofinechemical.com - www.biofinechemical.com

HAZARD RATINGS



Section 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HAZARD

Not hazardous

No hazards determined by using Bio-Chem criteria

PRECAUTIONARY STATEMENTS

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
ceresin	8001-75-0	>95
as purified ozokerite	12198-93-5	

Section 4 - FIRST AID MEASURES

SWALLOWED

For advice, contact a Poisons Information Centre or a doctor.
· If swallowed do NOT induce vomiting.
· If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
· Observe the patient carefully.
· Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious
· Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
· Seek medical advice.

EYE

If this product comes in contact with the eyes:
· Immediately hold eyelids apart and flush the eye continuously with running water.
· Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
· Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
· Transport to hospital or doctor without delay.
· Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

In case of burns:
· Quickly immerse affected area in cold running water for 10 to 15 minutes.
· Bandage lightly with a sterile dressing. Treat for shock if required.
· Lay patient down. Keep warm and rested.
· Transport to hospital, or doctor.

INHALED

· If fumes or combustion products are inhaled remove from contaminated area.
· Lay patient down. Keep warm and rested.
· Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
· Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
· Transport to hospital, or doctor.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

· Foam.
· Dry chemical powder.
· BCF (where regulations permit).
· Carbon dioxide.
· Water spray or fog - Large fires only.

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard.
· Wear breathing apparatus plus protective gloves.
· Prevent, by any means available, spillage from entering drains or water courses.
Cool fire exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

· Combustible.
· Slight fire hazard when exposed to heat or flame.
· Heating may cause expansion or decomposition leading to violent rupture of containers.
· On combustion, may emit toxic fumes of carbon monoxide (CO).
· May emit acrid smoke.
· Mists containing combustible materials may be explosive.

NOTE: Burns with intense heat. Produces melting, flowing, burning liquid and dense acrid black smoke.

FIRE INCOMPATIBILITY

Avoid contamination with strong oxidising agents as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

Slippery when spilt.
Clean up all spills immediately.
Place in suitable containers for disposal.

MAJOR SPILLS

Slippery when spilt.
Clear area of personnel.
Control personal contact by using protective equipment.
Prevent, by any means available, spillage from entering drains or water courses.
Collect recoverable product into labelled containers for recycling.
Collect residues and seal in labelled drums for disposal.
After clean up operations, decontaminate and launder all protective clothing and

equipment before storing and re-using.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS

\+ + + + + +

+: May be stored together
O: May be stored together with specific preventions
X: Must not be stored together

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Use good occupational work practice.
Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Avoid breathing mist and vapour, especially at high temperatures.
Avoid contact with skin and eyes.
Avoid contact with incompatible materials.
Avoid all ignition sources.
When handling, DO NOT eat, drink or smoke.
Wash hands with soap and water after handling.
Launder contaminated clothing before re-use.

SUITABLE CONTAINER

Packaging as recommended by manufacturer.
No restriction on the type of containers.

STORAGE INCOMPATIBILITY

Avoid storage with oxidisers.
Avoid storage at temperatures higher than 40 deg. C.

STORAGE REQUIREMENTS

Observe manufacturer's storing and handling recommendations.
Store away from sources of heat or ignition / naked lights.
Store in a cool, dry place.
Store away from oxidising materials.
Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

• ceresin: CAS:8001- 75- 0 CAS:8021- 55- 4 CAS:64742- 33- 2 CAS:37208- 14- 3 CAS:8021- 58- 7 CAS:84136- 31- 2

• ozokerite: CAS:12198- 93- 5

MATERIAL DATA

INGREDIENT DATA
OZOKERITE:
TLV* TWA: 2 mg/m3 (fume)
ES* TWA: 2 mg/m3 (fume)
These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:
· the architecture of the air spaces remain intact,
· scar tissue (collagen) is not synthesised to any degree,
· tissue reaction is potentially reversible.
Extensive concentrations of P.N.O.C.s may:
· seriously reduce visibility,
· cause unpleasant deposits in the eyes, ears and nasal passages,
· contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]
This limit does not apply:
· to brief exposures to higher concentrations
· nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.
This exposure standard applies to particles which
· are insoluble or poorly soluble* in water or, preferably, in aqueous lung fluid (if data is available) and
· have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization , or cause toxic effects other than by inflammation or by a mechanism of lung overload).

PERSONAL PROTECTION



EYE
· Safety glasses with side shields; or as required,
· Chemical goggles.
· Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC

NIOSH Current Intelligence Bulletin 59].

HANDS/FEET
Wear general protective gloves: i.e. Disposable polythene gloves or Cotton gloves or Light weight rubber gloves, with Barrier cream preferably Safety footwear.

For fume:

OTHER
· Eyewash unit.
Overalls.

RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	P2	-	-
	Air- line*	-	-
50 x ES	Air- line**	P2	PAPR- P2
	-	Air- line*	-
100 x ES	-	Air- line**	PAPR- P3

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.
For further information consult your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS
None under normal operating conditions.
If risk of overexposure exists, wear SAA approved respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
A mixture of hydrocarbons of complex composition (ozokerite) purified by treatment with concentrated sulfuric acid and filtration through bone-black. Found in Ukraine, Lake Baikal, Utah, Texas.
White or yellow, tasteless waxy cakes with slight odour; does not mix with water. Soluble in 30 parts ab. alcohol, benzene, chloroform, petroleum ethers and hot oils.
Stable towards oxidising agents.

PHYSICAL PROPERTIES
Solid.
Does not mix with water.
Floats on water.

Molecular Weight: Not applicable.
Melting Range (°C): 61- 78
Solubility in water (g/L): Immiscible
pH (1% solution): Not available.
Volatile Component (%vol): Not available.

Boiling Range (°C): Not available
Specific Gravity (water=1): 0.91- 0.92
pH (as supplied): Not applicable
Vapour Pressure (kPa): Not available.
Evaporation Rate: Not available

Relative Vapour Density (air=1): >1
Lower Explosive Limit (%): Not available
Autoignition Temp (°C): >250
State: Divided solid

Flash Point (°C): 190 min
Upper Explosive Limit (%): Not available
Decomposition Temp (°C): Not available.

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED
Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).
Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.
Considered to be non toxic.
Not normally a hazard due to the physical form of product. The material is a physical irritant to the gastro-intestinal tract.

EYE
Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Not normally a hazard due to physical form of product.

SKIN
The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Considered to be non toxic.
Not readily absorbed through the skin.

INHALED
The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Not normally a hazard due to non-volatile nature of product.
Inhalation hazard is increased at higher temperatures.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact and inhalation of vapour from heated material.
As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.
Implantation studies in rats show that paraffin oils may be tumorigens.

TOXICITY AND IRRITATION

Not available. Refer to individual constituents.

OZOKERITE:

TOXICITY	IRRITATION
Oral (rat) LD50: >5000 mg/kg*	Skin (rabbit): 500 mg/24h - Mild
	Eye (rabbit): 100 mg - Mild

Section 12 - ECOLOGICAL INFORMATION

No data for ceresin.

Section 13 - DISPOSAL CONSIDERATIONS

Consult manufacturer for recycling options.
Consult State Land Waste Management Authority for disposal.
Bury or incinerate residue at an approved site.
Return empty containers to supplier or bury empty containers at an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

No regulations applicable
No data available for ceresin as CAS: 8001-75-0, CAS: 8021-55-4, CAS: 64742-33-2, CAS: 37208-14-3, CAS: 8021-58-7, CAS: 84136-31-2.

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
ceresin	8001- 75- 0, 8021- 55- 4, 64742 - 33- 2, 37208- 14- 3, 8021- 58- 7, 84136- 31- 2