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Safety Data Sheet

CHLORINATED PARAFFIN WAX

1. IDENTIFICATION

Chemical Name	Chlorinated Paraffin Wax
Trade Name	Chlorinated Paraffin Wax
Synonyms	Carbowax, Chloraffin,
Recommended use	Uses include: plasticizers in plastics (PVC), flame retardants, additives in rubber and sealants.
Restrictions	None
Supplier	**SunBoss Chemicals Corp.**
Address	**8-110 West Beaver Creek Road** **Richmond Hill, ON L4B 1J9**
Telephone	**905-707-3433**
Fax	**905-707-7393**
Emergency Information	***After normal hours call Chemtrec at 1-800-424-9300***

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Target Organs:	None
GHS Classification	Not classified

GHS Label elements

Pictograms:	None
Signal word:	No signal word
Hazard Statement(s)	No known significant effects or critical hazards
Precautionary Statement(s)	Not applicable
Supplemental Hazard information	Not applicable
Supplemental label elements for certain mixtures	Not applicable

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Potential Health Effects:

Inhalation	Avoid Inhalation. May cause respiratory tract irritation.
Ingestion	May cause irritation of the digestive tract.
Skin contact	May cause mild skin irritation. May cause a rash and itching of the skin.
Eye Contact	May cause mild eye irritation. Signs/symptoms can include redness, swelling, pain and tearing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Common Names and Synonyms	Concentration %
Chlorinated Paraffin 70% CAS Number: 63449-39-8 EINECS Number: 264-150-0	Chlorinated Paraffin Wax Carbowax, Chloraffin	≥ 99%

4. FIRST AID PROCEDURES

Inhalation	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Ingestion	If swallowed, wash out mouth with water provided the person is conscious. Call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Skin	Remove contaminated clothing, wash skin with water, using soap if available. Launder clothing before reuse. Seek medical attention if irritation persists.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes by separating the eyelids with fingers. Get medical attention if irritation persists.
Note to Physician	Provide symptomatic/supportive care as necessary.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Foam, dry chemical, or carbon dioxide spray.
Unsuitable Extinguishing Media	Do not use water jet.
Specific Hazards/hazardous combustion products	No specific hazards. Decomposition products include carbon dioxide, carbon monoxide and carbonyl halides.

Special Fire Fighting Procedures	If there is a fire, isolate the scene and remove all persons from the vicinity of the incident. No untrained personnel should attempt to extinguish fire.
Special Protective Equipment	Fire fighters should wear full protective clothing, including self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate the area. Wear protective equipment specified. Avoid the generation of dust. Keep untrained personnel away from spill.
Environmental Precautions	Prevent further leakage or spillage of product. Do not let product enter waterways, drains or soil. Inform environmental authorities in the product has entered the sewer, waterways, soil or air.
Clean up Methods	Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Isolate spill and stop leak where safe. Scoop up and remove solids. For large spill, collect material with a non-combustible, absorbent product such as sand or earth. Do NOT spread spilled product with water.

7. HANDLING AND STORAGE

Handling	Wear appropriate protective clothing and gloves. Avoid generating or breathing dust. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust required. Close containers of unused product. Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.
Storage	Store tightly closed containers in a cool, dry, well-ventilated area. Keep away from ignition sources, heat and flame. Store away from strong oxidizing materials and food.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS	AGCIH (TLV)	OSHA (PEL)
Chlorine Paraffin	Not established	Not established

Engineering Controls	General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product. Discharge from the ventilation system should comply with the applicable air pollutions control regulations. Eliminate ignition sources.




Respiratory	Use in well-ventilated area. Use appropriate organic vapour mask and dust filter.

Eyes	Wear safety glasses with side shields or goggles to protect against exposure.
Skin	Normal work coveralls. Launder contaminated clothing before reuse.
Gloves	Use gloves as a standard industrial handling procedure. All cleanable impervious glove types are acceptable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Beige powder or granules
Odour	Weak
pH	Not available
Softening Point	85-110°C
Boiling Point	605.4°C at 760 mmHg
Flash Point	301.5°C
Evaporation Rate	Not available
Flammability	Not flammable
Exposure Limits	Not established
Vapour Pressure	3×10^{-3} Pa @ 65°C
Vapour Density (Air =1)	Not available
Relative Density	1.63 g/cm^3 @ 25°C
Bulk Density	Not available
Solubility in Water	Almost insoluble
Other Solubility	Slightly soluble in alcohol and soluble in most aromatic, aliphatic and terpene hydrocarbons, ketones, esters and vegetable and animal oils
Partition Coefficient: n-octonal/water	Log Pow = 8.69 - 12.83
Decomposition Temperature	Not determined
Viscosity	28.0 Pa.s @ 25°C
Thermal Stability Index	0.15% max (175°C, 4Hrs)
Specific Gravity	1.6×10^3 kg/m^3
Molecular Weight	411.4503
Molecular Formula	$C_{23}H_{41}Cl_7$

10. STABILITY AND REACTIVITY

Reactivity	None
Chemical Stability	Stable under normal conditions of handling, use and transportation.
Possible Hazardous Reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to avoid	Keep away from heat, sparks and flame. Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.
Incompatibility	Oxidizing agents, acids, alkalis.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Carbon monoxide, Carbon dioxide, Hydrogen chloride gas.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute Oral toxicity	LD_{50} = 900 mg/kg (rat)
Acute Dermal toxicity	LD_{50} = 5070 mg/kg (rat)
Acute Inhalation toxicity	Not reached.
Principle routes of Exposure	Inhalation. Dermal - skin.
Ingestion	May cause irritation of the digestive tract, nausea and diarrhea.
Skin contact	May cause an allergic skin reaction.
Inhalation	Exposure to dust particles may cause irritation of the respiratory tract.
Eye Contact	May cause mild eye irritation. Signs/symptoms can include redness, swelling, pain and tearing.
Aggravated Conditions	None.
Carcinogenicity	The NTP reported that under the conditions of 2-year gavage studies, clear evidence existed of the carcinogenicity of the long-chain, chlorinated paraffins in male $B_6C_3F_1$ mice. Re-evaluation of this study by the Experimental Pathology Laboratories, Inc (EPA) found NTP's initial characterization incorrect and concluded that "long-chain chlorinated paraffins should not be classified as potential carcinogens." (59 Fed. Reg. 61462)
Primary Irritation Effect	Moderately irritating.
Genotoxicity	Bacterial mutagenic *in vitro* and *in vivo* studies on long chain chlorine paraffins (LCCPs) have all been negative, supporting the contention that chlorine paraffins are not mutagenic. Additionally, no chromosomal aberrations were observed in dominant lethal studies in rats.
Reproductive/Developmental Toxicity	Teratology tests all showed negative results.

12. ECOLOGICAL INFORMATION

Acute toxicity to fish	3800 µg/l 60 days (*Onchorhynchus mykiss*)
Acute toxicity to daphnia	EC_{50} = 0.006 mg/l/48h (*Daphnia magna*)
Acute toxicity to crustaceans	LC_{50} = 1.0 mg/l/96h (*Gammarus pulex*)
Bioaccumulation	120 µg/l 60 days (*Mytilus edulis)*
Persistence and Degradability	Not available
Mobility in Soil	Not available
Other Adverse Effects	No known critical hazards or effects.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	This material is a non-hazardous waste. Bury in a licensed landfill or burn in an approved incinerator according to federal, state, and local regulations. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.
Contaminated Packaging	If empty container retains product residues, all label precautions must be observed. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Dispose of container according to national or local regulations. Do NOT reuse container.

14. TRANSPORT INFORMATION

DOT

UN/ID No.	Not regulated
Proper Shipping Name	None
Hazard Class	None
Packing Group	None

IATA

UN/ID No.	Not regulated
Proper Shipping Name	None
Hazard Class	None
Packing Group	None

IMDG

UN/ID No.	Not regulated
Proper Shipping Name	None
Hazard Class	None
Packing Group	None

TDG (Canada) Not Regulated

15. REGULATORY INFORMATION

USA - TSCA	This substance is listed in the inventory
Canada - DSL	This substance is listed in the inventory
EINECS/ELINCS	This substance is listed in the inventory
Australia – AICS	This substance is listed in the inventory
Korea - ECL	This substance is listed in the inventory
Japan - ENCS	This substance is listed in the inventory
China – IECSC	This substance is listed in the inventory
Philippines - PICCS	This substance is listed in the inventory

US Regulations

SARA Section 302	Not Listed
SARA 311/312 Hazard Categories	No immediate, delayed or fire hazard
SARA 313 Chemical	None
RCRA Status	Not a RCRA waste

Other regulations:

California Proposition 65: None of the components are listed.

New Jersey Right-to-know List: Listed under the category “Chlorine”

Pennsylvania Right-to-Know List: Listed under the category “Chlorine”.

Minnesota Right-to-Know List: Listed under the category “Chlorine”.

Massachusetts Right-to-Know Law: Listed under the category “Chlorine”.

FDA Status 21 CFR:
Regulated for use under the following sections of 21CFR:
175.105: Components of adhesives.
177.1650 – Substances for Use as Basic Components of Single and Repeated Use Food Contact Surfaces.

Canadian Regulations
WHMIS Symbol/Hazard Class

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NPRI — Not determined

NFPA Rating (Scale 0-4)

0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard

HEALTH	2
FIRE	1
REACTIVITY	0

HMIS Classification (Scale 0-4)

0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard

HEALTH	2
FIRE	1
REACTIVITY	0

16. OTHER INFORMATION

Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. SunBoss Chemicals Corp. extends no warranty and assumes no responsibility for the accuracy or sufficiency of the content and expressly disclaims all liability for reliance thereon. This safety data sheet provides guidelines for the safe handling of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. It is the responsibility of the user to comply with all Federal, State and local laws and regulations. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

Abbreviations and Acronyms
ACGIH: American Conference of Governmental Industrial Hygienists Inc.
CAS: Chemical Abstracts Service (Division of American Chemical Society)
DOT: Department of Transportation (USA)
EINECS: European Inventory of Existing Commercial Chemical Substances
HMIS: Hazardous Materials Identification System (USA)
IARC: Internal Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Marine Code for Dangerous Goods
LD50: Lethal Dose Medium
LC50: Lethal Concentration Medium
EC50: Effective Concentration Medium
NIOSH: National Institute for Occupational Safety and Health
NFPA: National Fire Protection Association (USA)
NPRI: National Pollutant Release Inventory (Canada)
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration (USA)
TDG: Transportation of Dangerous Goods (Canada)
TLV: Threshold Limit Value
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information Systems (Canada)

17. REVISION DATE

Revision number: 2
Date of Issue: November 14, 2014
Changes: Reformatted and updated according to Global Harmonized System (GHS)