HIND CHEMISALES
(CHEMICAL DIVISION)

MATERIAL SAFETY DATA SHEET

Chlorinated Paraffin

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1. IDENTIFICATION

Trade Marks and Synonyms (if any)	C14-17 chlorinated paraffin (containing < 1% C10-13) (chlorination: 40-63%), ARYAFIN-B1/B2/B3
Chemical Names and Synonyms	Alkanes , C14-17 , chloro Chlorinated Paraffin Wax
Physical Form	Amber to light pale yellow, almost clear/viscous liquid having slight characteristic odour
Molecular Formula	$[C_n H_{(2n+2-m)} Cl_m]$ where n=14 to 17 , m~6
Manufacturer Name & Address	Hind Chemisales (Chemical Division) Block A - 326 (A,B, & C) Matasya Industrial Area, Alwar - 301001 (Rajasthan) Telephone:0144 - 2338349
Responsible Person	Safety Officer; Hind Chemisales (Chemical Division) Alwar - 301001 (Rajasthan)

2. INFORMATION OF MAJOR INGREDIENTS

Chemical Name	C14-17 chlorinated Paraffin
CAS No	85535-85-9
Formula	$[C_n H_{(2n+2-m)} Cl_m]$ where n=14 to 17 , m~6

3. HAZARD IDENTIFICATION

Main Risk	None
Contact with skin	No irritation, on contact for small duration
Contact with eyes	Causes irritation
Safety Phrases	Keep out of reach of children. In case of contact with skin, wash immediately with plenty of water.

4. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour	Clear, Pale yellow mobile – viscous liquid, low
pH (10% aqueous solution)	6.0 – 7.0
Chlorine Content	About 51% m/m
Specific gravity at 25°C	1.10 – 1.45 @ 25°C
Boiling Point	>200,Decomposes below boiling point
Freezing Point	Data not available
Flash Point (deg. C)	None
Auto ignition (deg. C)	None
Flammable Limit	UEL: Not Applicable LEL: Not Applicable
Vapour Pressure (mm Hg)	Not Applicable
Decomposition Temperature	Above160°C
Solubility in Water	Insoluble
Solubility in Organic Solvents	Soluble in most aromatic hydrocarbons , chlorinated solvents , esters and ketones
Pour Point (Deg C)	-40 to +27

STABILITY AND REACTIVITY

Stability	As supplied, It is stable at normal temperatures and pressures. Non flammable under fire conditions
Conditions to avoid	Strong oxidizing agents, heat and hot surfaces.
Material to avoid	Alkali metals and alkaline earth metals which have a strong affinity for chlorine. Can react with iron, zinc and aluminum at high temperatures leading to decomposition. Material tends to soften or swell most rubbers.

Reactivity

Air	No Reaction
Water	No Reaction
Acids	Contact with mineral acids can lead to degradation
Alkalis	Reacts with alkaline or alkaline earth metals, which have a strong affinity for chlorine.
Hazardous Decomposition Products	Prolonged heating at temperatures in excess of 70°C or heating above 200°C for short periods will result in decomposition and liberation of hydrogen chloride.

6. TOXICITY DATA

Short term effects when:

In contact with skin	Repeated exposure may cause skin dryness and cracking. Unlikely to be hazardous by skin absorption.
In contact with eyes	By analogy with a similar substance this material is likely to cause slight eye irritation.
Inhaled	Not volatile at room temperature. Inhalation is not a likely route of exposure at normally encountered temperatures.
Ingestion	Ingestion of large amounts of chlorinated paraffin's may cause intestinal obstruction. Repeated exposure to high levels may result in liver or kidney damage.
Acute Oral Toxicity (Rats)	LD_{50}>4000 mg/kg
Chronic Toxicity	Not Available
Carcinogenic Toxicity	No data is available on the carcinogenicity of chlorinated paraffins to humans
Mutagenic Toxicity	Studies for mutagenicity were negative.
Reproductive Toxicity	No information is available.

7. FIRST AID MEASURES

Skin Contact	Remove contaminated clothing and wash affected area with sufficient quantity of soap and water for 15-20 minutes
Eye Contact	Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain medical attention.
Inhalation	Remove patient from exposure, keep warm and at rest.
Ingestion	Do not induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink.
Further Medical Advice	If in doubt, seek medical attention.

8. FIRE AND EXPLOSION HAZARD DATA

Fire Extinguishing Data	It is nonflammable. Use extinguishing media suitable for surrounding fire. Heating will emit fumes. Water spray, foam, carbon dioxide or dry powder may be used. Keep containers cool with copious amounts of water.
Would any material saturated with this product be subject to spontaneous combustion?	No
Fire Fighting Protective Equipment	Wear full protective clothing
Unusual Fire and Explosive Hazards	During a fire in which this material is involved, hydrogen chloride (HCl) may be liberated.

9. PERSONAL PROTECTION

General Precautions	Eye and skin protection should be used when Handling C14-17 chlorinated paraffin
Ventilation Requirements	None
Respiratory Protection	Not normally required.

Protective Clothing	Protective overall, Polythene gloves, Hard hat, Acid resistant boots
Eye Protection	Goggles or full-face mask.

10. HANDLING AND STORAGE

Handling	Avoid contact with eyes. Avoid prolonged skin contact. Provide adequate ventilation where operational procedures demand it. Do not allow to enter drains , sewers or watercourses.
Storage	Keep only in original container at temperatures not exceeding 40°C. Keep containers dry. Keep away from direct sunlight. Storage vessels should be made of lined mild steel

11. SPILLAGE/ACCIDENTAL RELEASE

Small Spillage	Absorb or contain liquid with sand or clay for disposal. Put leaking containers in a labeled drum. Wash spill area with large volumes of water.
Large Spillage	Transfer or pump to a labeled, sealable container for product recovery or safe disposal. Wash spills area with large volumes of water and allow to drain it into waste treatment system. Collect liquid either by pumping into an emergency. Do not allow entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.
Personal Precautions	Wear full protective clothing.
Environmental Precautions	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers and inform relevant authorities.

12. WASTE DISPOSAL

Waste Disposal	This material and/or its container must be disposed of as hazardous waste. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Disposal should be in accordance with local , state or national legislation.

13. ENVIRONMENTAL INFORMATION

Bio - Accumulation	No relevant data is available.
Biodegradability	The product is partially removed in biological treatment processes. Biodegradation appears to occur under both aerobic and anaerobic conditions, but the data is poor.
Toxicity	A representative C14-17 chlorinated paraffin has been shown to be toxic to daphnia in laboratory studies. It showed a low level of toxicity to another aquatic invertebrate species (gammarus) and to fish and algae. Toxicity to aquatic species: Daphnia magna 48 hr EC_{50} = 0.006 mg/l
Mobility	If released into water the product will sink. The product is in volatile and insoluble and will accumulate on the ground.

14. REGULATORY INFORMATION

Danger Symbol	NA
Risk Phrases	**R40/R20/R22:** Harmful: possible risk of irreversible effects through inhalation and if swallowed. **R36:** Irritating to eyes **R50/53:** Very toxic to aquatic organisms, may cause long term adverse effects **R64:** May cause harm to breast feed babies **R66:** Repeated exposure may cause skin dryness or cracking
Safety Phrases	**S1/2:** Keep locked up and out of the reach of children. **S24/25:** Avoid contact with skin and eyes. **S23:** Do not breathe gas/flumes/vapour/spray. **S36/37/39:** Wear suitable protective clothing, gloves and eye/face protection. **S45:** In case of accident or if you feel unwell, seek medical advice immediately and show the label where possible) **S6O:** Material and its container must be disposed of as hazardous waste **S61:** Avoid release to the environment

15. TRANSPORT INFORMATION

UN No.	3082
EC No:	287-477-0
PACKAGING GROUP	III

16. **OTHER INFORMATION**

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

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