

CHLORINATED PARAFFIN (CP)

Date of compilation: 24-08-2026 | Revised: 24-08-2026 | Version: 1

SECTION 1: IDENTIFICATION

1.1 GHS Product identifier:

CHLORINATED PARAFFIN (CP)
Chlorinated Paraffin Wax, Chloroparaffin, Paraffin Waxes and Hydrocarbon Waxes, Chloro
CAS: 63449-39-8

Other means of identification:

Not relevant. Note: this CAS covers a family of chlorinated paraffins of varying carbon-chain length and chlorine content; the specific chain-length (short/medium/long) and chlorination percentage (typically 40–70% Cl by weight) of the grade supplied should be confirmed against the product-specific technical data sheet/certificate of analysis, as this affects both physical properties and applicable regulatory status (see Section 15).

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Plasticiser and secondary flame retardant in PVC compounding, extreme-pressure/lubricity additive in metalworking fluids, sealants, paints and coatings, rubber processing aid. For industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3. Short-chain chlorinated paraffins (SCCPs, C10-13, ≥48% Cl) are restricted/prohibited under the Stockholm Convention on Persistent Organic Pollutants and corresponding national regulations in many jurisdictions – confirm the chain-length profile of the specific grade supplied before use in any application where SCCP content would be restricted.

1.3 Supplier's details:

SURAJ CHEMICALS
No 92, Govindappa Naicken Street, Shiva Complex, Chennai – 600001, Tamil Nadu, India
Tel: +91 - 7092722822, +91 - 9840284032 / +91 - 44 - 25393652, 42130281
Email: sales@surajchemicals.com | Website: www.surajchemicals.com
GST No: 33ACEPV8190L1ZZ

1.4 Emergency phone number:

Emergency Contact No: +91 - 7092722822, +91 - 9840284032

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS:
Classification of this product has been carried out in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), based on standard published data for medium/long-chain chlorinated paraffin grades of the general commercial type covered by this CAS. Short-chain (C10-13) chlorinated paraffin grades carry a more severe harmonised classification (including Carc. 2, H351) under certain regulatory regimes – confirm chain length for the specific grade supplied; the classification below applies to standard medium/long-chain commercial grades.

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic hazard, Category 2, H411
-------------------	--

2.2 GHS label elements, including precautionary statements:

GHS: Warning

Hazard statements:

Aquatic Chronic 2: H411 – Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264: Wash hands thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/eye protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391: Collect spillage.
P501: Dispose of contents/container in accordance with local regulations.

2.3 Other hazards which do not result in classification:

Combustion or excessive thermal processing (e.g. accidental overheating, incineration under uncontrolled conditions) can release hydrogen chloride gas and other chlorinated decomposition products, including trace dioxins/furans under uncontrolled combustion conditions – combustion/disposal must always be via a properly controlled, permitted facility (see Section 13). Short-chain (C10-13, ≥48% Cl) chlorinated paraffins are classified by some regulatory bodies as persistent, bioaccumulative and toxic (PBT) and are restricted under the Stockholm Convention; confirm the chain-length profile of the grade supplied.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Chemical description: Chlorinated Paraffin (medium/long-chain commercial grade, chlorination level and chain-length per product-specific technical data sheet)

In accordance with Annex 4.3.3 of the GHS, the product contains:

Identification	Chemical Name / Classification	Concentration
CAS: 63449-39-8	Chlorinated paraffin – Aquatic Chronic 2: H411	≥98% (chlorine content typically 40–70% w/w depending on grade – exact chlorination level and chain-length distribution available on request per product code)

To obtain more information on the hazards of the substances, consult sections 11, 12 and 16.

3.2 Mixtures:

Non-applicable

SECTION 4: FIRST AID MEASURES

4.1 Description of necessary first-aid measures:

Under normal handling, first aid is generally not required. If needed:

By inhalation:

If vapour/mist or thermal decomposition fumes cause irritation, remove the person to fresh air and keep at rest. Seek medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing. Wash affected skin thoroughly with soap and water. Seek medical attention if irritation persists.

By eye contact:

Rinse eyes thoroughly with plenty of water for several minutes, holding eyelids open. Seek medical attention if irritation persists.

By ingestion/aspiration:

Rinse mouth with water. Do not induce vomiting. Seek medical advice if a large quantity is swallowed or discomfort occurs.

4.2 Most important symptoms/effects, acute and delayed:
Considered to be of low acute toxicity by standard routes of exposure; may cause mild, transient skin/eye irritation on direct, prolonged contact. See sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:
Not relevant; treat symptomatically if needed.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media:
Suitable: Water spray/fog, foam, dry chemical powder, carbon dioxide.
Unsuitable: High-pressure/solid water jet may scatter and spread burning material.

5.2 Specific hazards arising from the chemical:
Combustible liquid/waxy solid; the high chlorine content confers a degree of self-extinguishing character but the product will burn when exposed to a sustained ignition source. Combustion/thermal decomposition releases hydrogen chloride gas, carbon monoxide, carbon dioxide and dense, irritant smoke; uncontrolled combustion may generate trace chlorinated dioxins/furans.

5.3 Special protective actions for fire-fighters:
Evacuate the area. Wear self-contained breathing apparatus and full chemical-protective clothing. Cool fire-exposed containers with water spray from a safe distance. Contain fire-fighting water run-off – do not allow to enter drains/watercourses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
For non-emergency personnel:
Avoid contact with skin and eyes. Spilled material is slippery – take care to prevent slips/falls. Use PPE per Section 8.

For emergency responders:
Wear appropriate protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
Prevent entry into drains, watercourses and soil – toxic to aquatic life with long lasting effects. Notify relevant authorities in case of significant release.

6.3 Methods and materials for containment and cleaning up:
Contain the spill with inert absorbent material (sand, earth, vermiculite or proprietary absorbent). Collect into a suitable labelled container for disposal. Clean residual traces with an appropriate detergent; avoid flushing to drain.

6.4 Reference to other sections:
See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:
A. General precautions for safe use:
Avoid contact with skin and eyes. Provide good general ventilation, particularly where the product is heated during processing.

B. Technical recommendations for the prevention of fires and explosions:
Keep away from open flames and strong heat sources. Store away from strong oxidisers and reactive metals (Section 10.5).

C. Technical recommendations on general occupational hygiene:
Do not eat, drink or smoke during handling; wash hands and exposed skin thoroughly after handling.

D. Technical recommendations to prevent environmental risks:
Prevent product from entering drains, soil or watercourses. Provide secondary containment for bulk storage.

7.2 Conditions for safe storage, including any incompatibilities:
A. Specific storage requirements:

Minimum Temp.	5°C (some grades may thicken/crystallise at low temperature – consult product-specific technical data sheet)
Maximum Temp.	<40°C, away from direct heat and sunlight
Maximum time	12–24 Months (unopened original packaging, cool dry storage)

B. General conditions for storage:
Store in a cool, dry, well-ventilated place away from strong oxidisers, reactive metals and direct sunlight, in tightly closed containers.

7.3 Specific end use(s):
Except for the instructions already specified, it is not necessary to provide any special recommendation regarding the uses of this product; confirm chain-length/chlorination grade suitability for the intended application, particularly with regard to SCCP restrictions (see Section 15).

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:
No substance-specific occupational exposure limit is notified for this general chlorinated paraffin CAS under the Factories Act, 1948. Control as an oil mist/nuisance dust where applicable:

Identification	Occupational Exposure Limit Type	Value
Chlorinated paraffin (as oil mist, general basis) CAS: 63449-39-8	Time Weighted average concentration (8 hrs)	5 mg/m³ (general mineral oil mist guidance)

8.2 Appropriate engineering controls:
Use local exhaust ventilation where the product is heated, sprayed or processed in a manner that generates mist/vapour.

B. Respiratory protection:
Not normally required for routine cold handling. Use an organic vapour/mist respirator where mist or thermal decomposition fumes are generated.

C. Specific protection for the hands:
Chemical-resistant gloves (nitrile or PVC).

D. Eye and face protection:
Safety glasses or chemical splash goggles.

E. Bodily protection:
Chemical-resistant apron/coveralls for prolonged or bulk handling.

F. Additional emergency measures:
Eyewash station and washing facilities should be available in the work area.

Environmental exposure controls:
Avoid environmental spillage of both the product and its container. See subsection 7.1.D.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance

Physical state at 20°C	Viscous liquid to waxy solid (grade/chlorination level dependent)
Appearance	Viscous liquid/wax
Color	Pale yellow to amber
Odor	Faint, characteristic mild odor
Odour threshold	Not relevant *
Volatility	
Boiling point at atmospheric pressure	Non-applicable (decomposes before boiling)
Vapour pressure at 20°C / 50°C	Very low/negligible
Evaporation rate at 20°C	Not relevant *
Product Description	
Density (relative) at 20°C	Approx. 1.15–1.6 g/cm³ (increases with chlorine content)
Dynamic / Kinematic viscosity	High viscosity liquid/semi-solid, grade dependent (available on request)
Concentration	≥98% chlorinated paraffin (grade-specific chlorine content available on request)
pH	Non-applicable (insoluble in water)
Vapour density at 20°C	Not relevant *
Partition coefficient n-octanol/water 20°C	High (log Pow >5, estimated – varies with chain length/chlorination)
Solubility in water at 20°C	Practically insoluble; soluble in mineral oils, aromatic and chlorinated solvents
Decomposition temperature	Releases hydrogen chloride on prolonged heating above approx. 150–200°C
Melting point/freezing point	Non-applicable for liquid grades; softening point varies with chlorination level for waxy grades (available on request)
Flammability	
Flash Point	Approx. >150°C (closed cup, grade dependent)
Flammability (solid, gas)	Combustible; high chlorine content confers a degree of self-extinguishing character
Autoignition temperature	Available on request (grade dependent)
Lower / Upper flammability limit	Not established *
Particle Characteristics	
Median equivalent diameter	Non-applicable (liquid/wax)

* Not relevant due to the nature of the product, not providing information on the properties of its hazards.

9.2 Other information:

Explosive properties	Not explosive
Oxidising properties	Not oxidising
Corrosive to metals	Not significantly corrosive under normal, dry conditions; hydrolysis products (trace HCl) may be mildly corrosive in the presence of moisture over long-term storage
Heat of combustion	Available on request (grade dependent)
Surface tension at 20°C	Not relevant *
Refraction index	Not relevant *

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Reacts with strong oxidising agents and reactive/finely divided metals (e.g. aluminium, zinc powder), with risk of exothermic reaction. Slowly hydrolyses in the presence of moisture at elevated temperature, releasing trace hydrogen chloride.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under normal conditions, hazardous reactions are not expected. Avoid contact with strong oxidisers and reactive metal powders.

10.4 Conditions to avoid:

Shock/Friction	Contact with Air	Increase in Temperature	Sunlight	Humidity
Not applicable	Not applicable	Decomposes/releases HCl above approx. 150–200°C	No particular effect	Avoid prolonged moisture contact (slow hydrolysis)

10.5 Incompatible materials:

Strong Oxidising Agents	Reactive/Finely Divided Metals	Strong Bases
Risk of vigorous/exothermic reaction	Risk of exothermic reaction	Slow reaction/dehydrohalogenation possible at elevated temperature

10.6 Hazardous decomposition products:

On combustion or strong heating: hydrogen chloride gas, carbon monoxide, carbon dioxide, and (under uncontrolled combustion conditions) trace chlorinated dioxins/furans.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Medium/long-chain chlorinated paraffins are generally considered to be of low acute toxicity; toxicological profile (particularly carcinogenicity classification) is chain-length dependent – short-chain (C10-13) grades carry a more severe classification in some jurisdictions (see Section 2.1). In case of exposure that is repetitive or prolonged, adverse health effects may result depending on the means of exposure:

A. Ingestion (acute effect):

Acute toxicity classification criteria are not met based on available data for medium/long-chain grades; not intended for ingestion.

B. Inhalation (acute effect):

Low vapour pressure limits inhalation exposure under normal handling; mist/fume from heated processing may cause respiratory irritation.

C. Contact with skin and eyes (acute effect):

May cause mild, transient irritation on prolonged or repeated contact.

D. CMR effects (carcinogenicity, mutagenicity, reproductive toxicity):

Short-chain chlorinated paraffins (C10-13, ≥48% Cl) are classified as Carc. 2 (H351, suspected of causing cancer) under certain regulatory regimes based on animal data; this classification is chain-length specific. Classification criteria for medium/long-chain grades are not met based on available data. Confirm the chain-length profile of the specific grade supplied.

E. Sensitizing effects:

Classification criteria for respiratory or skin sensitisation are not met based on available data.

- F. Specific target organ toxicity (STOT) – single exposure:**
Classification criteria are not met based on available data.
- G. Specific target organ toxicity (STOT) – repeated exposure:**
Classification criteria are not met for medium/long-chain grades based on available data.
- H. Aspiration hazard:**
Not classified based on available data; high viscosity limits aspiration risk.

Product-specific toxicological information:

Identification	Acute Toxicity	Genus
Chlorinated paraffin (medium/long-chain) CAS: 63449-39-8	LD50 oral: >2000 mg/kg (representative literature value for medium/long-chain grades)	Rat
	LD50 dermal: >2000 mg/kg (representative literature value)	Rabbit

SECTION 12: ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

12.1 Toxicity:

Acute Toxicity	Species	Genus
LC50: approx. 0.1–1 mg/L (96h, literature range, chain-length dependent)	Non-applicable	Fish
EC50: approx. 0.1–1 mg/L (48h, literature range, chain-length dependent)	Non-applicable	Crustacean

12.2 Persistence and degradability:

Not readily biodegradable; persistence increases with chain length and chlorination level. Short-chain, highly-chlorinated grades (SCCPs) are recognised as persistent organic pollutants under the Stockholm Convention.

12.3 Bioaccumulative potential:

High potential for bioaccumulation (high log Pow); bioaccumulation potential is chain-length and chlorination-level dependent, with short-chain grades of particular regulatory concern.

12.4 Mobility in soil:

Koc	Henry	Dry Soil	Moist Soil
High (low water solubility, strongly sorbs to organic matter)	Low	Low mobility	Low mobility

12.5 Results of PBT and vPvB assessment:

Short-chain chlorinated paraffins (C10-13, ≥48% Cl) are recognised as PBT/vPvB substances and are listed under the Stockholm Convention on Persistent Organic Pollutants. Medium/long-chain grades are subject to ongoing regulatory review in various jurisdictions; confirm current status and chain-length profile of the specific grade supplied.

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Do not discharge to drains or the environment. Dispose of via a licensed hazardous waste contractor using a permitted high-temperature incineration facility with appropriate flue-gas treatment (to control HCl and dioxin/furan formation), or as otherwise directed by local hazardous waste regulations. Packaging that has contained the product should be handled as contaminated packaging.

Refer to national and local regulations on waste management, including any applicable restrictions for short-chain chlorinated paraffin content.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land (ADR 2023 / RID 2023):

14.1 UN number	Not assigned
14.2 UN proper shipping name	Non-hazardous for transport under ADR/RID (not meeting dangerous goods classification criteria for standard medium/long-chain grades)
14.3 Transport hazard class(es)	Not classified
14.4 Packing group	N/A
14.5 Environmental hazard	Yes (Environmentally Hazardous Substance, aquatic) – bulk shipments above regulatory thresholds may require Class 9 environmentally hazardous substance marking; consult current shipping documentation
14.6 Special precautions for user	Physico-chemical properties: see section 9
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Applicable for bulk liquid shipment – consult current IBC Code category for the specific grade

Transport of dangerous goods by sea (IMDG 41-22):

14.1 UN number	Not assigned
14.2 UN proper shipping name	Non-hazardous for transport under IMDG for standard medium/long-chain grades
14.3 Transport hazard class(es)	Not classified
14.4 Packing group	N/A
14.5 Marine pollutant	Yes
14.6 Special precautions for user	Non-applicable
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Applicable for bulk liquid shipment – consult current IBC Code category for the specific grade

Transport of dangerous goods by air (IATA/ICAO 2024):

14.1 UN number	Not assigned
14.2 UN proper shipping name	Non-hazardous for transport under IATA/ICAO
14.3 Transport hazard class(es)	Not classified
14.4 Packing group	N/A
14.5 Environmental hazard	Yes
14.6 Special precautions for user	Non-applicable
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of local circumstances, in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product. Short-chain chlorinated paraffins (SCCPs, C10-13, ≥48% Cl) are listed under Annex A of the Stockholm Convention on Persistent Organic Pollutants; confirm the chain-length/chlorination

profile of the grade supplied against current national POPs regulations before use, especially for export or in regulated end-use sectors.

Other legislation:

- The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
- Water (Prevention and Control of Pollution) Act, 1974

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Annex 4 – Guidance on the preparation of Safety Data Sheets of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Texts of the legislative phrases mentioned in sections 2 and 3:

- H351: Suspected of causing cancer (chain-length dependent, short-chain grades only).
- H411: Toxic to aquatic life with long lasting effects.

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components/chain-length variants which appear in section 3.

Advice related to training:

Personnel should be trained to recognise the chain-length dependent regulatory status of chlorinated paraffins and to confirm the specific grade supplied against current restrictions before use in a new application.

Principal bibliographical sources:

The United Nations Economic Commission for Europe (UNECE); Stockholm Convention on Persistent Organic Pollutants; publicly available GHS classification and physical/toxicological reference data for CAS 63449-39-8 and related chlorinated paraffin CAS numbers.

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road | IMDG: International maritime dangerous goods code | IATA: International Air Transport Association | ICAO: International Civil Aviation Organisation | IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk | SCCP: Short-Chain Chlorinated Paraffin | POP: Persistent Organic Pollutant | LD50: Lethal Dose 50 | LC50: Lethal Concentration 50 | EC50: Effective Concentration 50 | Log-POW: Octanol-water partition coefficient | Koc: Partition coefficient of organic carbon | PBT: Persistent, Bioaccumulative, Toxic | vPvB: very Persistent, very Bioaccumulative

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within Suraj Chemicals' awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

END OF SAFETY DATA SHEET