



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Cetyl chloride

CAS No. : 4860-03-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended uses : Laboratory chemicals

Uses advised against: Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company : Krishna Solvechem Limited.
B/503, Sahayog, S. V. Road,
Kandivali (West), Mumbai – 400067. India.

Telephone : +91-22-6123 0222

Email : exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Irritation	(Category 2)
Eye Irritation	(Category 2)
Specific target organ toxicity (single exposure)	(Category 3)
Target Organs - Respiratory system.	

2.2 Label elements

Pictogram :



Signal word Warning

Hazard statement (s)H315 Causes skin irritation

H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary statement (s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

R36/37/38 Irritating to eyes, respiratory system and skin

S-phrase(s)

S24/25 Avoid contact with skin and eye

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27 Take off immediately all contaminated clothing.

S28 After contact with skin, wash immediately with plenty of soap-suds.

S29 Do not empty into drains.

S30 Never add water to this product.

S35 This material and its container must be disposed of in a safe way.

S36 Wear suitable protective clothing



SECTION 3: Composition / information on ingredients

3.1

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight.
Cetyl chloride	4860-03-1	225-461-7	C ₁₆ H ₃₃ Cl	260.89 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice:	If symptoms persist, call a physician.
If inhalation :	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
In case of skin contact :	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion :	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2 Most important symptoms and effects :	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
4.3 Notes to Physician :	Treat symptomatically

SECTION 5: Firefight effects

5.1 Extinguishing media

Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam.
Unsuitable Extinguishing Media: :	No information available
5.2 Flash Point :	136 °C
Method :	Closed cup



Autoignition Temperature: 220 °C
Explosion Limits:
Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical : Carbon oxides, Hydrogen chloride gas

Hazardous Combustion Products : No data available

5.4 Protective Equipment and Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA:

Health	Flammability	Instability	Physical hazards
2	1	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mists or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. For disposal see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition-No smoking. Take measures to prevent the build up of electrostatic charge.



7.2 Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers Which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2 Exposure controls

Personal protective equipment -

Eye / Face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 Derived from it.

Body protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, and the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators and appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Colorless Liquid
b) Odour	No information available
c) Odour Threshold	No information available
d) pH	4 – 6
e) Melting point / freezing point	8 - 14 °C
f) Initial boiling point and	322 °C



boiling range	
g) Flash point	136 °C Method : Closed cup
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Non Flammable
j) Upper/lower flammability or explosive limits	No data available No data available
k) Vapour pressure	1.7hPa@ 140 °C
l) Vapour density	No data available
m) Specific Gravity	0.865 g/ml at 25°C
n) Solubility	Insoluble in water
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	220 °C

SECTION 10: Stability and Reactivity

10.1 Reactive Hazard :	No data available
10.2 Chemical stability :	No data available
10.3 Possibility of hazardous reactions :	No data available
10.4 Conditions to avoid :	Heat, flames and sparks. Extremes of temperature and direct sunlight.
10.5 Incompatible materials:	Strong oxidizing agents, Strong bases
10.6 Hazardous decomposition products :	No data available
10.7 Hazardous Polymerization	No data available



SECTION 11: Toxicological information

11.1

Information on toxicological effects

Acute toxicity:

Product Information: No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation : No information available

Sensitization: No information available

Carcinogenicity : IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Mutagenic Effects: No information available.

Reproductive Effects: No information available.

Developmental Effects : No information available.

Teratogenicity: No information available.

STOT - single exposure : None known

STOT - repeated exposure: None known

Aspiration hazard : No information available.

Symptoms / effects, both acute and delayed: No information available

Endocrine Disruptor Information : No information available
Potential health effects

Inhalation: May be harmful if inhaled. Cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Cause skin irritation.

Eyes: Cause eye irritation



SECTION 12: Ecological information

12.1

Ecotoxicity:

Ingredient

1-Chlorohexadecane Persistence: Water/soil HIGH, Air LOW

Bioaccumulation Mobility LOW Refer to data for ingredients, which follows:

1-CHLOROHEXADECANE:

Marine Pollutant: Yes

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Haloalkanes do not hydrolyse easily.

transformations. Several bacterial strains including methane-utilizing bacteria capable of utilizing haloalkanes have been isolated. Microbial dehalogenation by these strains is mediated by enzymes

The biodegradation of haloalkanes can proceed through different pathways.

DO NOT discharge into sewer or waterways.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

14.1 UN number :

ADR/RID: 3082

IMDG: 3082

IATA: 3082

14.2 UN proper shipping name

ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS 1-CHLOROHEXADECANE)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS 1-CHLOROHEXADECANE)

IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS 1-CHLOROHEXADECANE)

14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging group:

ADR/RID: III

IMDG: III

IATA: III



SECTION 15: Regulatory information

15.1 REGULATIONS

1-chlorohexadecane (CAS: 4860-03-1) is found on the following regulatory lists;

"Canada Non-Domestic Substances List (NDSL)", "OECD Representative List of High Production Volume(HPV) Chemicals", "US EPA High Production Volume Program Chemical List", "US Toxic Substances Control Act (TSCA) - Inventory", "US TSCA Section 4 (e) - ITC Priority Testing List", "US TSCA Section 8 (a) - Preliminary Assessment Information Rules (PAIR) - Reporting List", "US TSCA Section 8 (d) – Health and Safety Data Reporting"

This safety data sheet complies with the requirements of Regulations (EC) No 1907/2006.

SECTION 16: Other information

16.2 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 given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.



Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1-Bromo-2-methylpropan e	-	X	-	-	-

