MATERIAL SAFETY DATA SHEET

www.britiscientific.com **Issue Date:**

1- Chemical Product Information and Company Identification.

Product Name: : Cyclo Hexane for LC-MS, ChromSolv®.
Synonym: : Hexahydrobenzene.
Product code: : BS14406.
CAS Number: : 110-82-7.
Company Name: : Briti Scientific.
Company Address: : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055. Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
110-82-7.	Hexahydrobenzene.	C_6H_{12}.

Section 3- Hazards Identification.

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225
Skin irritation (Category 2), H315
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Aspiration hazard (Category 1), H304
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410
For the full text of the H-Statements mentioned in this Section, see Section 16.
Classification according to EU Directives 67/548/EEC or 1999/45/EC
F Highly flammable R11
Xn Harmful R65
Xi Irritant R38 R67
N Dangerous for the R50/53
Environment
Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram
Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P273 Avoid release to the environment.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P331 Do NOT induce vomiting.
P501 Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard none
Statements

Section 4- First Aid Measures.

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed
No data available

Section 5- Fire Fighting Measures.

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture
Carbon oxides
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
Use water spray to cool unopened containers.

Section 6- Accidental Release Measures.

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
Reference to other sections
For disposal see section 13.

Section 7- Handling and Storage.

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities
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. Storage class (TRGS 510): Flammable liquids

Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8- Exposure Control/Personal Protection.

Control parameters
Components with workplace control parameters
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.
Personal protective equipment
Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
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.
Body Protection
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., 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 are 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).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9- Physical and Chemical Properties.

Information on basic physical and chemical properties
Appearance Form: liquid
Colour: colourless
Odour: No data available
Odour Threshold: No data available

Ph: No data available
Melting point: 6 °C.
Boiling point: 81 °C.
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower Upper explosion limit: 9 %(V)
flammability or Lower explosion limit: 1 %(V)
explosive limits
Vapour density: No data available
Relative density: 0.779 g/ml.
Water solubility: No data available
Decomposition: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available

Section 10- Stability and Reactivity.

Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
Heat, flames and sparks.
Incompatible materials
Strong oxidizing agents
Hazardous decomposition products
Other decomposition products - No data available

Section 11- Toxicological Information.

Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 12.705 mg/kg
LC50 Inhalation - Rat - 4 h - 34.000 mg/l
(OECD Test Guideline 403)
LD50 Dermal - Rabbit - > 2.000 mg/kg
Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Mild eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

May be fatal if swallowed and enters airways.

Additional Information

RTECS: GU6300000

Central nervous system depression, Drowsiness, Irritability, Dizziness, Gastrointestinal disturbance, Lung
irritation, chest pain, pulmonary edema

Section 12- Ecological Information.

Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) - 4,53 mg/l - 96 h (OECD Test Guideline 203)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - 0,9 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 3,4 mg/l - 72 h (OECD Test Guideline 201)

Persistence and degradability

Biodegradability Result:

Bioaccumulative potential

No data available

Mobility in soil

No data available

- Readily biodegradable.

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects

Very toxic to aquatic life.

Section 13- Disposal Considerations.

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14- Transport Information.

UN number

ADR/RID: 1145 IMDG: 1145 IATA: 1145

UN proper shipping name

ADR/RID: CYCLOHEXANE

IMDG: CYCLOHEXANE

IATA: Cyclohexane

Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

Packaging group

ADR/RID: II IMDG: II IATA: II

Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

Special precautions for user

No data available

Section 15- Regulatory Information.

Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.