1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Pentachloroethane

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008
Carcinogenicity (Category 2)
Specific target organ toxicity - repeated exposure (Category 1)
Chronic aquatic toxicity (Category 2)

According to European Directive 67/548/EEC as amended.
Limited evidence of a carcinogenic effect. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxic: danger of serious damage to health by prolonged exposure through inhalation.

Label elements

Pictogram

Signal word Danger

Hazard statement(s)
H372 Causes damage to organs through prolonged or repeated exposure.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
P314 Get medical advice/attention if you feel unwell.

Hazard symbol(s)
T Toxic
N Dangerous for the environment

R-phrase(s)
R40 Limited evidence of a carcinogenic effect.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S23 Do not breathe gas/fumes/vapour/spray.
S36/37 Wear suitable protective clothing and gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C2HCl5
Molecular Weight : 202,29 g/mol

CAS-No.	EC-No.		Classification	Concentration
Pentachloroethane				
76-01-7	200-925-1	-	Carc. 2; STOT RE 1; Aquatic Chronic 2; H372, H351, H411 T, N; Carc.Cat.3, R40 - R48/23 - R51/53	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. 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
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.

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.

Hydrolyses readily.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

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).

Hand protection
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection
Face shield and safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Colour	colourless

Safety data

pH	no data available
Melting point	-29 °C at 0,1 hPa
Boiling point	161 - 162 °C - lit.
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	1,68 g/cm3 at 25 °C
Water solubility	no data available
Partition coefficient: n-octanol/water	log Pow: 3,131

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agentsStrong oxidizing agents, Water, Reacts violently with:, Alkali metals, Lithium, Potassium, Sodium/sodium oxides

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Oral - rat - 920 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Ataxia. Liver:Other changes.

LC50 Inhalation - rat - 2 h - 4238 ppm

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Limited evidence of carcinogenicity in animal studies

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Pentachloroethane)

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
Inhalation - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
no data available

Potential health effects

Inhalation	Toxic if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Additional Information
RTECS: KJ6300000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish	mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 30 mg/l - 96,0 h LC50 - Pimephales promelas (fathead minnow) - 7,34 mg/l - 96,0 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 4,7 mg/l - 48 h

Persistence and degradability

Bioaccumulative potential

Bioaccumulation	Lepomis macrochirus - 7,5 d Bioconcentration factor (BCF): 67

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID
UN-Number: 1669 Class: 6.1 Packing group: II
Proper shipping name: PENTACHLOROETHANE

IMDG
UN-Number: 1669 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: PENTACHLOROETHANE
Marine pollutant: Marine pollutant

IATA
UN-Number: 1669 Class: 6.1 Packing group: II
Proper shipping name: Pentachloroethane

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Aquatic Chronic	Chronic aquatic toxicity
Carc.	Carcinogenicity
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
STOT RE	Specific target organ toxicity - repeated exposure
N	Dangerous for the environment
T	Toxic
R40	Limited evidence of a carcinogenic effect.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

For R&D use only. Not for drug, household or other uses.

WARRANTY:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.