

# HEXACHLOROETHANE

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name: HEXACHLOROETHANE  
CAS Number: 67-72-1  
EC Number: 200-666-4

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

Recommended use: Laboratory chemicals, Industrial & for professional use only

### 1.3 Details of the supplier of the safety data sheet

**Company name:** East Harbour Group Ltd  
20 Clough Road, Severalls Industrial Park  
Colchester, Essex, CO4 9QS  
United Kingdom

**Telephone:** +44 (0) 333 242 0100  
**Email:** [info@eastharbourgroup.com](mailto:info@eastharbourgroup.com)

### 1.4 Emergency telephone number

**Emergency telephone:** 0800 246 1274

## Section 2: Hazardous identification

### 2.1 Classification of the substance or mixture

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**

Pictogram



Signal word

Warning

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**Hazard statement(s)**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s)**

P261	Avoid breathing dust.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard Statements	none

**2.3 Other hazards**

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

## Section 3: Composition/information on ingredients

**3.1 Mixtures**

Synonyms:	Perchloroethane
Formula:	C <sub>2</sub> Cl <sub>6</sub>
Molecular weight:	236.74 g/mol
CAS-No.:	67-72-1
EC-No.:	200-666-4

**Hazardous ingredients according to Regulation (EC) No 1272/2008**

Component	Classification	Concentration
Hexachloroethane	Skin Irrit. 2; Eye Irrit. 2;	<= 100 %
CAS-No. 67-72-1	Carc. 2; STOT SE 3;	
EC-No. 200-666-4	Aquatic Acute 1; Aquatic	
	Chronic 1; H315, H319, H351,	
	H335, H400, H410 M-Factor –	
	Aquatic Acute: 1	

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

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## Section 4: First aid measures

### 4.1 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: 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.

### 4.2 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

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## Section 5: Fire-fighting measures

### 5.1 Fire Fighting Media and Instructions:

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## Section 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 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.

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### 6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non-Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredients with workplace control parameters  
Contains no substances with occupational exposure limit values.

### 8.2 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.

### 8.3 Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 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: Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the 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

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Form: crystalline
	Colour: white
<b>Odor</b>	No data available
<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting Point/ freezing point</b>	Melting point/range: 183 - 185 °C
<b>Initial boiling point and boiling range</b>	No data available
<b>Flash Point</b>	>113.00 C – closed cup
<b>Evaporation Rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Explosion Limits</b>	No data available
<b>Vapor Pressure</b>	0.4 mmHg at 20.0 °C
<b>Vapor Density</b>	No data available
<b>Relative Density</b>	2.091 g/mL at 25 °C
<b>Water Solubility</b>	No data available
<b>Partition Coefficient: n- octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available

### 9.2 Other safety information

No data available

## Section 10: Stability and Reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical Stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	No data available
<b>10.4 Conditions to avoid</b>	No data available
<b>10.5 Incompatible materials</b>	Strong oxidizing agents, Strong bases

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## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas  
No data available

## Other decomposition products -

In the event of fire: see section 5

## Section 11: Toxicological Information

### 11.1 Toxicological effects:

#### Acute toxicity

LD50 Oral - Guinea pig - 4,970 mg/kg (Hexachloroethane)

TDL0 Oral - Rat - female - 5,500 mg/kg (Hexachloroethane)

TDL0 Oral - Rat - 6,944 mg/kg (Hexachloroethane)

Remarks: Liver: Changes in liver weight. Kidney, Ureter, Bladder: Changes in tubules (including acute renal failure, acute tubular necrosis). Kidney, Ureter, Bladder: Other changes.

TDL0 Oral - Rat - 48,750 mg/kg (Hexachloroethane)

Remarks: Brain and Coverings: Other degenerative changes. Liver: Changes in liver weight. Kidney, Ureter, Bladder: Other changes.

TDL0 Oral - Rabbit - 12,000 mg/kg (Hexachloroethane)

Remarks: Liver: Other changes. Kidney, Ureter, Bladder: Other changes.

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

Inhalation: Behavioural: Muscle weakness. (Hexachloroethane)

LD50 Dermal - Rabbit - 32,000 mg/kg (Hexachloroethane)

LD50 Intraperitoneal - Mouse - 4,500 mg/kg (Hexachloroethane)

LDLO Intraperitoneal - Rat - 2,900 mg/kg (Hexachloroethane)

LDLO Intravenous - Dog - 325 mg/kg (Hexachloroethane)

#### Skin corrosion/irritation

No data available (Hexachloroethane)

#### Serious eye damage/eye irritation

No data available (Hexachloroethane)

#### Respiratory or skin sensitisation

No data available (Hexachloroethane)

#### Germ cell mutagenicity (Hexachloroethane)

Hamster - ovary Sister chromatid exchange

#### Carcinogenicity

This product is or contains a component that has been reported to be possi classification. (Hexachloroethane)

Limited evidence of carcinogenicity in animal studies (Hexachloroethane) (Hexachloroethane)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Hexachloroethane)

#### Reproductive toxicity

No data available (Hexachloroethane)

#### Specific target organ toxicity - single exposure

No data available (Hexachloroethane)

#### Specific target organ toxicity - repeated exposure

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No data available  
Aspiration hazard  
No data available (Hexachloroethane)

## Additional Information

RTECS: KI4025000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Hexachloroethane)

Kidney - (Hexachloroethane)

## Section 12: Ecological Information

### 12.1 Toxicity

Toxicity to fish

NOEC - *Cyprinodon variegatus* (sheepshead minnow) - 1 mg/l - 96 h(Hexachloroethane)

Toxicity to daphnia and other aquatic invertebrates

LC50 - *Daphnia magna* (Water flea) - 1.36 mg/l - 48 h(Hexachloroethane)

### 12.2 Persistence and degradability

Biodegradability

Result: - Not biodegradable (OECD Test Guideline 301)

### 12.3 Bioaccumulative potential

Bioaccumulation

*Lepomis macrochirus* (Bluegill) - 28 d - 0.00617 mg/l(Hexachloroethane) Bioconcentration factor (BCF): 139

### 12.4 Mobility in soil

No data available (Hexachloroethane)

### 12.5 Results of PBT and vPvB assessment

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

### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

No data available

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

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**Contaminated packaging**

Dispose of as unused product

## Section 14: Transport Information

**14.1 UN Number**

ADR/RID: 3077 IMDG: 3077 IATA: 3077

**14.2 UN proper shipping name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexachloroethane)  
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexachloroethane)  
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexachloroethane)

**14.3 Transport hazard class(es)**

ADR/RID: 9 IMDG: 9 IATA: 9

**14.4 Packaging group**

ADR/RID: III IMDG: III IATA: III

**14.5 Environmental hazards**

ADR/RID: Yes IMDG Marine Pollutant: No IATA: Yes

**14.6 Special precautions for user**

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging's and combination packaging's containing inner packaging's with Dangerous Goods > 5L for liquids or > 5kg for solids.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## Section 15: Regulatory Information

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

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

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

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## Section 16: Other Information

### Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### Further information

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.