SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-X-00049
Product Name	Iodobenzene
CAS No.	591-50-4
Category	Reagents
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Serious eye damage/eye irritation (Category 2)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Precautionary Statement(s)

Code	Statement
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	Not available
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen
P317	Not available
P330	Not available
P337+P317	If eye irritation persists: Get medical help.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Iodobenzene
CAS Number : 591-50-4
Molecular Formula : C6H5I
Molecular Weight : 204
Parent Chemical : -
Synonyms : Not available
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms persist or are severe.
Inhalation: Move person to fresh air. Keep at rest. If breathing is difficult, seek medical attention.
Skin contact: Wash with plenty of soap and water. Get medical attention if irritation develops or persists.
Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
Not available.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically. No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media: Use extinguishing measures appropriate to surrounding fire (e.g., dry chemical, foam, carbon dioxide, water spray).
Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
May emit hazardous fumes/vapors on heating or combustion. Thermal decomposition products: Not available.

5.3 Advice for firefighters
Wear self-contained breathing apparatus (SCBA) and full protective gear. Cool containers with water spray if exposed to fire. Prevent fire-fighting water from entering drains or waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing vapors/mist. Avoid contact with skin and eyes. Ensure adequate ventilation. Wear appropriate personal protective equipment.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Prevent entry into drains, surface waters, and soil.

6.3 Methods and material for containment and cleaning up
Contain spill. Absorb with inert material (e.g., sand, earth, vermiculite). Collect into suitable, labeled containers for disposal. Clean contaminated area with suitable cleaning method. Dispose of waste in accordance with local regulations.

6.4 Reference to other sections
See Section 8 for personal protective equipment and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors/mist. Avoid contact with skin, eyes, and clothing. Use only with adequate ventilation. Keep container tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated place. Keep container tightly closed. Protect from heat and ignition sources.
Incompatible materials: Not available.

7.3 Specific end use(s)
Reagent. No data available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits: Not available.
Biological limit values: Not available.

8.2 Exposure controls
Engineering controls: Use local exhaust ventilation or general ventilation to maintain exposure below applicable limits (if established).
Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Wear protective gloves. Wear protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate, use appropriate respiratory protection.
- Hygiene measures: Wash hands thoroughly after handling. Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available

Property	Value
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Heat, flames, sparks, and other ignition sources. Other conditions: Not available.

10.5 Incompatible materials
Not available.

10.6 Hazardous decomposition products
Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: LC50 (rat) = 16,320 mg/m3 /LABORATORY ANIMALS: Acute Exposure/ NMRI Albino mice, in which the hepatic glutathione (GSH) content was decreased by nearly 50% by either the administration of a pure glucose diet or by starvation, were intoxicated with aryl halides, bromobenzene, and iodobenzene (13 and 9 mmol/kg body weight, respectively, po). After both intoxications, the hepatic glutathione content decreased rapidly to very low

values, and liver necrosis, as assessed by serum transaminase levels, occurred in about 45 or 60% of the animals (in the case of bromobenzene or iodobenzene, respectively) after a lag phase of 9 or 6 hr. In both instances liver necrosis was evident only when the hepatic GSH depletion reached a threshold value (3.5-2.5 nmols/mg protein). The same threshold value was evident for the occurrence of lipid peroxidation (measured as both carbonyl functions and conjugated dienes in liver phospholipids). The possibility that the depletion in hepatic GSH level is capable of inducing lipid peroxidation and necrosis could be supported by the fact that similar results were obtained after the administration of diethylmaleate (12 mmol/kg, p.o.), a drug which is expected to conjugate directly with GSH without previous metabolism ...
- Skin corrosion/irritation: Causes respiratory tract irritation. ... Causes skin irritation. Causes eye irritation. /SIGNS AND SYMPTOMS/ Causes respiratory tract irritation. May be harmful if absorbed through skin. Causes skin irritation. Causes eye irritation. Harmful if swallowed.
- Serious eye damage/eye irritation: Causes respiratory tract irritation. ... Causes skin irritation. Causes eye irritation. /SIGNS AND SYMPTOMS/ Causes respiratory tract irritation. May be harmful if absorbed through skin. Causes skin irritation. Causes eye irritation. Harmful if swallowed.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- /SIGNS AND SYMPTOMS/ Causes respiratory tract irritation. May be harmful if absorbed through skin. Causes skin irritation. Causes eye irritation. Harmful if swallowed.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
No data available.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/container in accordance with local/regional/national/international regulations. Do not discharge to drains or the environment.
Contaminated packaging: Dispose of as unused product unless cleaned according to applicable regulations.
Waste codes: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
Not available.

14.2 UN proper shipping name
Not available.

14.3 Transport hazard class(es)
Not available.

14.4 Packing group
Not available.

14.5 Environmental hazards
Not available.

14.6 Special precautions for user
Not available.

14.7 Maritime transport in bulk according to IMO instruments
Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not available.

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

SECTION 16: Other information

Product name: Iodobenzene

Catalog No.: CS-X-00049
CAS No.: 591-50-4
Supplier: Clearsynth Labs Ltd., Mumbai, India
Emergency phone: +91-22-245045900

Disclaimer: The information provided is based on available product information and is intended for guidance in safe handling, use, processing, storage, transportation, disposal, and release. It does not constitute a warranty of any kind. Users are responsible for compliance with applicable laws and regulations.
Revision date: Not available.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.