

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Printing date 25.03.2013

Revision: 25.03.2013

1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: 3-Iodo-2-propynylbutylcarbamate (IPBC)**
- **CAS Number:**
55406-53-6
- **EC number:**
259-627-5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Biocide
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Iofina Chemical
1025 Mary Laidley Drive
Covington, KY 41017
Phone: 859-356-8000
- **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585



2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400, H410.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R22: Harmful if swallowed.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:** Not applicable.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**
3-Iodo-2-propynylbutylcarbamate
- **Hazard statements**
The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400.
H302 Harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Hazard description:**
- **WHMIS-symbols:**
D1B - Toxic material causing immediate and serious toxic effects



- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2
FIRE 0 Fire = 0
REACTIVITY 0 Reactivity = 0

- **HMIS Long Term Health Hazard Substances**

Substance is not listed.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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3 Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
55406-53-6 3-Iodo-2-propynylbutylcarbamate
- **Identification number(s)**
- **EC number:** 259-627-5

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Take affected persons out into the fresh air.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately rinse with water.
Clean with water and soap.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Gastric or intestinal disorders
Allergic reactions
- **Hazards** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
If swallowed, gastric irrigation with added, activated carbon.
If necessary oxygen respiration treatment.
Treat skin and mucous membrane with antihistamine and corticoid preparations.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.

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- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective clothing.
Avoid formation of dust.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Protect from humidity and water.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from humidity and water.

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- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when high concentrations are present.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR
Nitrile rubber, NBR
Neoprene gloves

- **Eye protection:**



Safety glasses

- **Body protection:** Light weight protective clothing

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- **Limitation and supervision of exposure into the environment**
No further relevant information available.
- **Risk management measures**
See Section 7 for additional information.
No further relevant information available.

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Solid
Colour:	Not determined.
Odour:	Characteristic
Odour threshold:	Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: 145 F° / 63 °C

· Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature: Not determined.

· Decomposition temperature: 375 °F / 192 °C

· Self-igniting: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 2×10^{-5} hPa

· Density at 20 °C: 1,54 ± 0,04 g/cm³

· Relative density: Not determined.

· Vapour density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

water at 20 °C: 0,156 g/l

· Partition coefficient (n-octanol/water) at 25 °C: 2,81 log POW

· Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

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· **9.2 Other information** No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**
Contact with acids releases toxic gases.
Reacts with peroxides and other radical forming substances.
Reacts with oxidizing agents.
Reacts with strong alkali.
- **10.4 Conditions to avoid** Store away from oxidizing agents.
- **10.5 Incompatible materials:** Contact with acids liberates toxic gases.
- **10.6 Hazardous decomposition products:**
Nitrogen oxides
Carbon monoxide and carbon dioxide
Corrosive gases/vapours
Poisonous gases/vapours
Iodine compounds

11 Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

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Oral	LD50	1470 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	>6,89 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Slight irritant effect on skin and mucous membranes.
- **on the eye:** Slight irritant effect on eyes.
- **Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.
- **Sensitisation:** Sensitization possible by inhalation and/or dermal contact.
- **Repeated dose toxicity:** Repeated exposures may result in skin and/or respiratory sensitivity.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
At present there are no ecotoxicological assessments.
The declarations are valid for the component with the highest toxicological risk.
Avoid transfer into the environment.
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · 14.1 UN-Number · DOT, ADR, IMDG, IATA | UN3077 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · DOT, IMDG, IATA · ADR | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (3-Iodo-2-propynylbutylcarbamate)
3077 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (3-Iodo-2-
propynylbutylcarbamate) |

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· **14.3 Transport hazard class(es)**

· **DOT, IMDG**



· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

· **ADR**



· **Class** 9 (M7) Miscellaneous dangerous substances and articles.
· **Label** 9

· **IATA**



· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

· **14.4 Packing group**

· **DOT, ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

· **Marine pollutant:** No
· **Special marking (ADR):** Symbol (fish and tree)
· **Special marking (IATA):** Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.
· **Danger code (Kemler):** 90
· **EMS Number:** F-A,S-F

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** 5 kg
· **Transport category** 3
· **Tunnel restriction code** E

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- | | |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · UN "Model Regulation": | UN3077, ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (3-Iodo-2-
propynylbutylcarbamate), 9, III |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

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- **TSCA (Toxic Substances Control Act):**

Substance is listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

Substance is listed.

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· Canadian Ingredient Disclosure list (limit 0.1%)

Substance is not listed.

· Canadian Ingredient Disclosure list (limit 1%)

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· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· Sources

SDS Prepared by:

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