

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

CTFA NAME: IODOPROPYNYL BUTYLCARBAMATE SYNONYMS: IPBC,1-iodo-2-propynylbutylcarbamate CHEMICAL FAMILY: ESTER FORMULA:  $C_8H_{12}INO_2$

## SECTION 2- COMPOSITION / INFORMATION ON INGREDIENTS

This listed components are considered to be hazardous based on OSHA's Hazard Communication Standard. For further regulatory information, See Section 15.

Chemical Name	CAS#	%	Agency	Exposure Limits
3-iodo-2-propynyl butyl carbamate	55406-53-6	97	None	applicable None established OSHA Regulatory Status: This product is classified as Hazardous under OSHA regulations.

## SECTION 3- HAZARDS IDENTIFICATION

Emergency Overview: Polyphase P100 is an off-white crystalline powder with a mild characteristic odor. May cause respiratory irritation and severe eye irritation with possible corneal injury if material comes in direct contact with the eyes. May evolve iodine vapors during combustion. Toxic to fish.

Routes of Entry: Ingestion, eye contact, inhalation

Ingestion: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Ingestion of excessive quantities may be harmful.

Skin: Direct contact may cause mild skin irritation

Eye Contact: May cause severe eye irritation with possible corneal injury unless washed from eyes promptly. The irritation and injury is reversible.

Inhalation: May cause transient respiratory irritation

Chronic Effects: There are no known reported chronic effects

Target Organs: Eyes

Carcinogenicity: This product (or component) is not listed as a carcinogen according to OSHA, NTP, IARC and ACGIH.

Medical Conditions Aggravated by Exposure: There are no known conditions aggravated by exposure to this product.

## SECTION 4- FIRST AID MEASURES

**Ingestion:** Immediately drink two glasses of milk, gelatin mixture or, if these are not available, a large quantity of water. Avoid alcohol. DO NOT give anything by mouth if the person is unconscious or having convulsions. Get medical attention immediately.

**Skin Contact:** Remove contaminated clothing. Wash affected areas with soap and water. If irritation or redness develops, get medical attention. Wash clothing before reuse.

**Eye Contact:** Wash eyes immediately with large amounts of water for at least 15 minutes. Get medical attention immediately.

**Inhalation:** If symptoms develop, remove from exposure area to fresh air promptly. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention.

**Notes to Physician:** IPBC is crystalline in structure. Flush eyes with water to remove crystals. Probable mucosal damage may contraindicate use of gastric lavage.

Have to product container or label with you when calling a poison control center or doctor, or going for treatment.

## SECTION 5- FIRE FIGHTING MEASURES

Flash Point:	Not applicable
Flammable Limits:	Not applicable
Autoignition Temperature:	No data
Flammability Class:	Non-hazardous
Hazardous Products of Combustion:	Carbon monoxide, carbon dioxide, nitrogen oxides, and iodine vapors
Fire Extinguishing Media:	Dry Chemical, carbon dioxide, water spray, or regular foam.
Fire Fighting Instructions:	Move container from fire area if you can do it without risk. Do not scatter spilled material with high-pressure water streams. Avoid breathing vapors, keep upwind. Positive

pressure self-contained breathing apparatus with full face piece and structural firefighters' protective clothing will provide limited

protection. Unusual Fire & Explosion Hazards: This material may burn but does not ignite readily. Runoff from fire control or dilution water may cause pollution. May evolve vapors of iodine.

## **SECTION 6- ACCIDENTAL RELEASE MEASURES**

Keep unnecessary people away from spill area. Wear protective equipment as specified in Section 8. Stop leak if you can do it without risk. For small dry spills, shovel material into clean, dry container and cover loosely; move containers from spill area. For large dry spill, cover spill with plastic sheet or tarp to minimize spreading or, if wet, dike far ahead of liquid spill for later disposal. If water pollution occurs, notify the appropriate authorities. Observe all Federal, State and Local regulations regarding notifications of accidental releases.

## **SECTION 7- HANDLING AND STORAGE**

Avoid contact with eyes and skin. Avoid breathing dust. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Avoid breakage of bagged material or spills of bulk material. Store away from incompatible substances in a cool, dry, ventilated area. Recommended storage at temperatures between 0 deg. C (32 deg. F) and 32 deg. C (90 deg. F). Do not store at temperatures above 112 deg. F (45 deg. C) for extended periods. Do not contaminate water, food, or feed by storage or disposal. Observe all Federal, State, and Local regulations when storing or disposing of this substance.

## **SECTION 8- PERSONAL PROTECTION / EXPOSURE CONTROLS**

Ventilation: Provide local exhaust or process enclosure ventilation to minimize exposure.

Eye/Face Protection: If potential for contact with material exists, use dust-resistant safety goggles or other approved eye protection.

Skin Protection: Wear impervious gloves and apron to prevent skin contact. Wear impermeable suit if exposure is

possible to a large portion of the body.

Respiratory  
Protection:

A respiratory protection program meeting OSHA 1910.134 must be followed whenever workplace conditions warrant the use of a respirator. If exposure may exceed recommended limits, a NIOSH/MSHA-approved respirator should be used based on exposure levels found in the

workplace.

Other: Eyewash should be available within the immediate work area for emergency use.

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-White crystalline powder
Odor:	Mild characteristic odor
Initial Boiling Point:	Not applicable
Melting Point:	65 -68 deg. C (149-154 deg. F)
Vapor Pressure at 20 deg. C:	<1.8 x 10 <sup>-5</sup> mm Hg
Vapor Density (Air=1):	Not applicable
Specific Gravity at 25 deg. C(Water=1):	1.51 – 1.57
Water Solubility:	156 ppm (20 deg. C)
pH:	Not applicable
Evaporation Rate (Butyl acetate=1):	<1
% Volatiles by Weight:	1% max

## SECTION 10- STABILITY AND REACTIVITY

Reactivity: Stable under normal temperatures and pressures

Conditions to Avoid: Avoid excessive heat >180 deg. C (>356 deg. F).

Incompatibility: Avoid contact with strong acids (pH <2) and bases (pH >10)

Hazardous Decomposition: Decomposition may release carbon monoxide, carbon dioxide, nitrogen oxides, and iodine vapors.

Hazardous Polymerization: Hazardous polymerization does not occur.

## SECTION 11- TOXICOLOGICAL INFORMATION

Acute Oral Effects: LD50 (oral, rat-female)- 1056 mg/kg; LD50 (oral, rate-male)- 1795 mg/kg.  
Acute Skin Effects: LD50 (dermal, rabbit) > 2000 mg/kg., slight irritant  
Acute Eye Effects: Severe irritation and corrosive (rabbit). The corrosion is completely reversible and the irritation is markedly reduced by the irrigation of the eyes with water 20-30 seconds after exposure to test sample.  
Acute Inhalation Effects: LC50 (rat, 4 hr) – 680 mg/m<sup>3</sup>

Subchronic Effects and Other Studies: Cholinesterase inhibition (rats) – This product administered as a single intravenous dose of up to 16 mg/kg does not inhibit cholinesterase activity. There are no known or reported effects on reproductive function or fetal development from exposure to this product.

## SECTION 12- ECOLOGICAL INFORMATION

Ecotoxicity: This product is toxic to fish. LC50 (bluegill sunfish, 96 hr flow-through) – 230 ug/l Octanol/water partition coefficient:  $K_{ow} = \log P = 2.81$  COD: 1148 mg/g

Environmental Fate: This product is a pesticide and may cause adverse environmental impact. Avoid contamination of streams and sewers. The fate of the active ingredient, IPBC, is quite favorable. Degradation is rapid and occurs through biological as well as non-biological processes.

## SECTION 13- DISPOSAL INFORMATION

RCRA Hazardous Waste: This product is not a RCRA Hazardous waste by definition.

Waste Disposal Procedure: The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all Federal, State, and Local Regulations.

## SECTION 14- TRANSPORTATION INFORMATION

### DOT

Shipping Name: Environmentally hazardous substance, solid n.o.s. (contains:3-iodo-2propnyl butyl carbamate) Hazard Class: 9-Misc. dangerous goods UN / NA Number: UN 3077 Packing Group: PG III  
Labels Required: Class 9 ERG#: 171

**IATA**

Shipping Name: Environmentally hazardous substance, solid n.o.s. (contains:3-iodo-2propnyl butyl carbamate) Hazard Class: 9-Misc. dangerous goods UN / NA Number: UN 3077 Packing Group: PG III Labels Required: Class 9 ERG#: 9L

**IMDG**

Shipping Name: Environmentally hazardous substance, solid n.o.s. (contains:3-iodo-2propnyl butyl carbamate) Hazard Class: 9-Misc. dangerous goods UN / NA Number: UN 3077 Packing Group: PG III Labels Required: Class 9 ERG#: F-A, S-F

**SECTION 15- REGULATORY INFORMATION****CERCLA Section 103 (40 CFR 302.4)**

This product does not contain any chemicals that are reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

**SARA Section 302 (40 CFR 355.30), SARA Section 304 (40 CFR 355.40)**

This product does not contain any chemicals that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on Reportable Quantities (RQ).

**SARA Hazard Categories, SARA Sections 311 / 312 (40 CFR 370.21)**

Acute: X

Chronic:

Fire:

Reactive:

Pressure:

**SARA Section 313 (40 CFR 372.65)**

This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986. This information must be included in all MSDS's that are copied and distributed for this material. Chemical Name

CAS # %

3-iodo-2-propynyl butyl carbamate 55406-53-6 97

### Chemical Inventories

The ingredients of this product are all on the following Chemical Substance Inventories, are exempt from the inventories, or are otherwise compliant with inventory requirements of the governing agency.

TSCA	X	U.S
EINECS	X	EUROPE
DSL / NDSL	X	CANADA
AICS	X	AUSTRALLA
ECL	X	KOREA
MITI,ENCS	X	JAPAN
PICCS	X	PHILLPPINES
IECSC	X	CHINA

### California Proposition

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This product does not contain any substances that are currently on the list of Known Carcinogens and Reproductive Toxins, at levels which would require a warning under the statute.

### State Right-To-Know

This product is regulated by Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is exempt for State Right-to-Know labeling requirements when labeled with an approved EPA label. EPA Registration no. 5383-50.

### SECTION 16- OTHER

Revisions Prepared by: Environmental and Regulatory Affairs Dept.

This MSDS has been revised in the following sections: Section 2 ( Revised active to 97% for consistency with product label) Section 9 ( Revised appearance, % volatiles) Section 14 ( Revised technical name in Shipping Name, Added PG and updated EMS # for IMDG) Section 15 ( Revised SARA 313 ingredient %, Updated Chemical Inventory Status.

Abbreviation PNOC: Particulates not otherwise classified STEL: Short – term exposure limit PNOR: Particulates not otherwise regulate

TLV: TWA: Threshold limit vale Time weighted average

HMIS Rating

NFPA Rating

Health: 2 0  
Flammability: 0  
Reactivity:

Health:  
Flammability: 2 0 0  
Reactivity:

Personal Protection: E

The information contained in this MSDS is believed to be accurate and reliable as of issue date, but no representation, guarantee, or warranty, express or implied is made to the accuracy, reliability, or completeness of the information. It is provided for the purpose of complying with hazard communication regulations. It is not intended as performance information or specifications for the product. It is the user's responsibility to determine the suitability of the product for his own use. Jeen International does not assume legal responsibility for reliance on information herein.