

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3-Iodo-2-propynyl butyl carbamate (IPBC)

GENERAL USE: Fungicide/Preservative/Disinfectant

PRODUCT DESCRIPTION: Off white crystalline solid with mild, characteristic odor.



Manufacturers Name:

H&S Chemical Co. Inc.

DATE PREPARED: 12/11/2007

SUPERSEDES: 4/2004

Page 1 of 4

ADDRESS (NUMBER, STREET, P.O. BOX)
1025 Mary Laidley Drive

TELEPHONE NUMBER FOR INFORMATION / customer service
1-859-356-8000

(CITY, STATE AND ZIP CODE) COUNTRY
Covington, KY 41017 USA

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER
North America: 1-800-255-3924
International: +01-813-248-0585

DISTRIBUTOR'S NAME

Not Applicable

ADDRESS (NUMBER, STREET, P.O. BOX)

TELEPHONE NUMBER FOR INFORMATION / customer service

(CITY, STATE AND ZIP CODE) COUNTRY

DISTRIBUTOR EMERGENCY TELEPHONE NUMBER

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	Cas #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 16)
3-Iodo-2-propynyl Butyl Carbamate	97%+	55406-53-6	259-627-5	None	R-20/22 R-41 R-50 R-50/53

Notes: OSHA Regulatory Status: This product is classified as Hazardous under OSHA regulations.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

An off white solid with a mild characteristic odor. May cause respiratory irritation and severe eye irritation with possible corneal injury if material comes into direct contact with the eyes. May evolve iodine vapors during combustion. Toxic to fish.

POTENTIAL HEALTH EFFECTS

INHALATION: May cause transient respiratory irritation

SKIN: Direct contact may cause mild skin irritation

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

INGESTION: Single dose toxicity is low. Ingestion of small quantities during handling is not likely to cause harmful effects. Ingestion of larger quantities is harmful.

MATERIAL SAFETY DATA SHEET			
PRODUCT NAME: 3-Iodo-2-propynyl butyl carbamate (IPBC) Date: 12/11/2007		Page 3 of 4	
PERSONAL PROTECTION:			
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. Normally respiratory protection is not required when using this product. Where protection from nuisance dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks).			
PROTECTIVE GLOVES: Wear impervious gloves and an apron to minimize skin contact.			
EYE PROTECTION: Use dust resistant Safety goggles or other approved eye protection			
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eyewash station should be available within the immediate work area for emergency use.			
WORK / HYGIENIC PRACTICES: Provide local exhaust or process enclosure ventilation to minimize exposure.			
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES			
APPEARANCE AND ODOR Off white crystalline powder with a mild characteristic odor.	VAPOR PRESSURE @20 °C <1.8X10 ⁻⁵ mm Hg		
pH Not Applicable	SPECIFIC GRAVITY (WATER = 1) @25 °C 1.51-1.57		
BOILING POINT / BOILING RANGE Not Applicable	SOLUBILITY IN WATER 156 ppm (20 °C)		
FLASH POINT Not Applicable	VISCOSITY Not Applicable		
FLAMMABLE LIMITS LEL: NA UEL: NA	VAPOR DENSITY (AIR = 1) Not Applicable		
AUTOIGNITION TEMPERATURE Not Applicable	EVAPORATION RATE (WATER = 1) Not Applicable		
SECTION 10 - STABILITY AND REACTIVITY			
STABILITY UNSTABLE: Stable X	CONDITIONS TO AVOID: Avoid excessive heat >180 °C (>356 °F).		
INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids (pH<2) and bases (pH >10)			
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, and iodine vapors.			
HAZARDOUS POLYMERIZATION: Does not occur.			
SECTION 11 - TOXICOLOGICAL INFORMATION			
Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
	(IPBC) 55406-53-6	Oral Rat Female-1056mg/Kg	
	259-627-5	Oral Rat Male -1795mg/Kg	
		Dermal,rabbit >2000mg/Kg	
		Eyes, rabbit-severe reversible irritant.	
			Rat 4hrs - 680 mg/Kg
SECTION 12 - ECOLOGICAL INFORMATION			
This product is toxic to fish. LC-50 (bluegill sunfish, 96 hr flow through- 230ug/l. COD: 1148 mg/g. Octanol /water partition coefficient: Kow=log P=2.81.			
Environmental fate: This product is a pesticide and may cause adverse environmental impact. Avoid contamination of steams 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 CONSIDERATIONS			
WASTE DISPOSAL METHOD: This product is not a RCRA hazardous waste by definition. The user of this material has the responsibility to dispose			

MATERIAL SAFETY DATA SHEET									
PRODUCT NAME: 3-Iodo-2-propynyl butyl carbamate Date: 12/11/2007		Page 4 of 4							
of unused material, residues, and containers in compliance with local, state and federal regulations.									
SECTION 14 - TRANSPORT INFORMATION									
PROPER SHIPPING NAME: Environmentally Hazardous Substance, solid N.O.S. contains 3-iodo-2-propynyl butyl carbamate									
DOT HAZARD CLASS / Pack Group:9/PGIII UN / NA IDENTIFICATION NUMBER: UN 3077 LABEL:Class 9 ERG#: 171 HAZARD SYMBOLS: Class 9		IATA HAZARD CLASS / Pack Group:9/PG III, ERG#9L IMDG HAZARD CLASS:9/PGIII, ERG#F-A,S-F. RID/ADR Dangerous Goods Code: Non-Hazardous for road transport. UN TDG Class / Pack Group: UN 3077/PGIII							
Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.									
SECTION 15 - REGULATORY INFORMATION									
TSCA (USA - Toxic Substance Control Act): Listed									
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act): Not Reportable									
313 REPORTABLE INGREDIENTS: (40CFR 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.									
<table border="1"> <thead> <tr> <th>Chemical Name</th> <th>CAS#</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>3-iodo-2-propynyl butyl carbamate</td> <td>55406-53-6</td> <td>97</td> </tr> </tbody> </table>				Chemical Name	CAS#	%	3-iodo-2-propynyl butyl carbamate	55406-53-6	97
Chemical Name	CAS#	%							
3-iodo-2-propynyl butyl carbamate	55406-53-6	97							
CERCLA (USA - Comprehensive Response Compensation and Liability Act): Not reportable									
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: Not listed									
CPR (Canadian Controlled Products Regulations): Complies									
IDL (Canadian Ingredient Disclosure List): Listed									
DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed									
EINECS (European Inventory of Existing Commercial Chemical Substances):Listed. This product is not considered hazardous according to E.U. directive 67/548/EEC. This chemical substance is not listed in a priority list (as foreseen under council regulation EEC No. 793/93).									
WGK German (Water Quality) : Listed									
RISK PHRASES:		SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:						
R-20/22			S-57-Use appropriate containment to avoid environmental contamination.						
R-41			S-61- Avoid release to the environment.						
R-50									
R-50/53									
SECTION 16 - OTHER INFORMATION									
Notes & full R-Phrase text		R20/22 -Harmful by inhalation and if swallowed. R41 - Risk of serious damage TO EYES. R50 -Very toxic to aquatic organisms R50/53 - Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.							
HMIS HAZARD RATINGS		HEALTH:	2						
		FLAMMABILITY:	0						
		REACTIVITY:	0						
		PERSONAL PROTECTIVE EQUIPMENT:	E						
		0 = INSIGNIFICANT	1 = SLIGHT						
		2 = MODERATE	3 = HIGH						
		4 = EXTREME							
REVISION SUMMARY: Supersedes 4/04 issue.									

MATERIAL SAFETY DATA SHEETPRODUCT NAME: 3-Iodo-2-propynyl butyl carbamate
Date: 12/11/2007

Page 5 of 5

MSDS Prepared by:ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.