

# SAFETY DATA SHEET

TROYSHIELD PA10



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

### 1.1 Product identifier

**Product name** : TROYSHIELD PA10  
**Code** : 10265  
**Product description** : Not available.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

**Identified uses**

Fungicide for the metal-working industry.

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

**e-mail address of person responsible for this SDS** : B.J. Vernooij, SDS Specialist (vernooib@troycorp.com)

#### Supplier

TROY CHEMICAL COMPANY BV  
 Uiverlaan 12e  
 PO Box 132  
 3145 XN Maassluis  
 The Netherlands  
 Phone: + 31 (0) 10 592-7494  
 Fax: +31 (0) 10 592-8877

**Hours of operation** : Monday - Friday: 08.30 - 17.00 (CET)

### 1.4 Emergency telephone number

**Emergency telephone number** : +1 703-741-5970 (EN)

#### National advisory body/Poison Center

Austria: Vergiftungsinformationszentrale, 01/406 43 43	Belgium: Centre anti-poison/Antigiftcentrum 070 245245	Czech Republic: 1.7 Nouzové telefonní číslo: Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha 2: telefon ( 24 hodin/den) 224919293, 224915402, 224914575	Denmark: Giftinformation: +45 35 31 60 60	Estonia: Mürgistusteabekeskus: 16662 Hädaabinumber: 112	Finland: Myrkytyskeskus 09-471977 or 09 4711
France: ORFILA (INRS): + 33 (0) 1 45 42 59 59	Germany: Giftnotrufzentrale Berlin: +49 030 - 192 40	Hungary: Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ) 1096 Budapest, Nagyvárud tér 2. +36-80-201199 (ingyenes, éjjel-nappal) +36-1-4766464	Ireland: NPIC:Phone 01-8092566; Fax: 01-8368476	Italy: Ospedale Niguarda Cà Granda, Milan 0266101029	Lithuania: Poison centre: 236 20 52
Netherlands: NVIC (medical personnel, 24/7): Tel: 030-2748888	Norway: Norwegian poison information center: 22 59 13 00	Poland: 112 (ogólny telefon alarmowy), 998 (straż pożarna), 999 (pogotowie medyczne); Ośrodki Informacji Toksykologicznej: +58 682 04 04 (Gdańsk), +12 411 99 99 (Kraków), +61 847 69 46 (Poznań), + 48 607 218 174 (Warszawa)	Slovakia: Toxikologické informačné centrum Limbova 5 833 05 Bratislava Tel. 02/5477 4166, 02/5477 4605	Slovenia: Center za obveščanje 112	Portugal: Centro de Informação Antivenenos: +351 808 250 143 Fax +351 213 303 275 (24 h/dia)
Sweden: 112	Switzerland: Schweizerisches Toxikologisches Informationszentrum: +41 - 1-145	Turkey: Not available.	United Kingdom (UK): NPIS 0870 800 6266	Spain: INSTITUTO NACIONAL DE TOXICOLOGIA 91 562 04 20	Greece: Children's hospital "P. Kyriakou", Thivon & Levadias 1, GR 11527, Goudi, Athens Tel. +30 210 7793 777
Latvia: Valsts ugunsdzēsības un glābšanas dienests, telefona numurs: 112. Toksikoloģijas un sepses klīnikas, Saindēšanās un zāļu informācijas centrs, Hipokrāta 2, Rīga, Latvija, LV-1038, tel.nr. +371 67042473	Croatia: Broj za izvanredna stanja: 112 Broj za medicinske informacije za Hrvatsku: 01 23 48 342 (Centar za kontrolu otrovanja)	Serbia: Broj telefona Nacionalnog centra za kontrola trovanja: +381 11-662 381 (24 sata)	Bulgaria: Национален Токсикологичен Център (Токсикология Пирогов) - 02/9154409	Iceland: (+354) 543-2222	Romania: +40 21 3183606/ Institutul National de Sanatate Publica, Bucuresti, str. Dr. Leonte, nr. 1-3, sector 5

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Product definition** : Mixture**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

STOT RE 2, H373 (larynx) (inhalation)

Aquatic Acute 1, H400

Aquatic Chronic 2, H411

**Ingredients of unknown toxicity** :**Ingredients of unknown ecotoxicity** :

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements****Hazard pictograms** :**Signal word** : Warning

**Hazard statements** :

- Causes serious eye irritation.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May cause damage to organs through prolonged or repeated exposure if inhaled. (larynx)
- Very toxic to aquatic life with long lasting effects.

**Precautionary statements****General** : Not applicable.**Prevention** : Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Do not breathe vapor.**Response** : Get medical attention if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes.**Storage** : Not applicable.**Disposal** : Collect spillage. Dispose of contents and container in accordance with all local, regional, national and international regulations.**Hazardous ingredients** : 3-iodo-2-propynyl butylcarbamate**Supplemental label elements** : Not applicable.**Special packaging requirements****Containers to be fitted with child-resistant fastenings** : Not applicable.**Tactile warning of danger** : Not applicable.**2.3 Other hazards****Other hazards which do not result in classification** : None known.

**SECTION 3: Composition/information on ingredients**

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification	
			Regulation (EC) No. 1272/2008 [CLP]	Type
oxydipropanol	REACH #: 01-2119456811-38 EC: 246-770-3 CAS: 25265-71-8	40 - 75	Not classified.	[2]
3-iodo-2-propynyl butylcarbamate	REACH #: Biocide  EC: 259-627-5 CAS: 55406-53-6 Index: 616-212-00-7	<10	Acute Tox. 4, H302  Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (larynx) (inhalation) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Other hazards which do not result in classification

**SECTION 4: First aid measures****4.1 Description of first aid measures****Eye contact**

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation**

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**

: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**SECTION 4: First aid measures**

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**4.2 Most important symptoms and effects, both acute and delayed****Potential acute health effects**

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

**Ingestion** : No specific data.

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds

**5.3 Advice for firefighters**

**Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s). (Applicable when exposure scenario is available.)

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

- : Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**SECTION 7: Handling and storage****7.3 Specific end use(s)****Recommendations** : Not available.**Industrial sector specific solutions** : Not available.**SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s). (Applicable when exposure scenario is available.)

**8.1 Control parameters****Occupational exposure limits****Europe**

No exposure limit value known.

**Germany**

oxydipropanol

**DFG MAC-values list (Germany, 8/2014). Absorbed through skin.**PEAK: 200 mg/m<sup>3</sup>, 4 times per shift, 15 minutes. Form: inhalable fractionTWA: 100 mg/m<sup>3</sup> 8 hours. Form: inhalable fraction**TRGS 900 OEL (Germany, 3/2015). Absorbed through skin.**TWA: 100 mg/m<sup>3</sup> 8 hours. Form: inhalable fractionPEAK: 200 mg/m<sup>3</sup> 15 minutes. Form: inhalable fraction

3-iodo-2-propynyl butylcarbamate

**DFG MAC-values list (Germany, 7/2015). Skin sensitizer.**PEAK: 0.116 mg/m<sup>3</sup>, 4 times per shift, 15 minutes.

PEAK: 0.01 ppm, 4 times per shift, 15 minutes.

TWA: 0.058 mg/m<sup>3</sup> 8 hours.

TWA: 0.005 ppm 8 hours.

**Switzerland**

oxydipropanol

**SUVA (Switzerland, 1/2015).**STEL: 280 mg/m<sup>3</sup> 15 minutes. Form: Inhalable dust (total dust)TWA: 140 mg/m<sup>3</sup> 8 hours. Form: Inhalable dust (total dust)

3-iodo-2-propynyl butylcarbamate

**SUVA (Switzerland, 1/2015). Skin sensitizer.**STEL: 0.24 mg/m<sup>3</sup> 15 minutes.

STEL: 0.02 ppm 15 minutes.

TWA: 0.01 ppm 8 hours.

TWA: 0.12 mg/m<sup>3</sup> 8 hours.**Recommended monitoring procedures**

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Derived effect levels**

No DELs available.

**Predicted effect concentrations**

No PECs available.

**8.2 Exposure controls**

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.



**SECTION 8: Exposure controls/personal protection****Individual protection measures**

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- > 8 hours  
for example KCL (Material: article number (thickness in mm)):  
Butyl: 0898 (0.7)  
Butyl II: 0897 (-)  
Neoprene Nitril I (Chloroprene Nitril): 0727 (0.7)  
Nitrile I: 0730 (0.4), 0733 (0.5)  
Nitrile thermoplastel: 0714, 0715  
Viton: 0890 (0.7)
- The above mentioned breakthrough times are based on KCL laboratory test results according to EN374 and are only applicable for these KCL gloves.
- This recommendation is only for the product delivered by us and for its intended purpose. Should the worker be exposed to mixtures of the product with other ingredients or to other products, safety advice on gloves can be obtained with the supplier of CE-approved gloves (i.e. KCL GmbH, D-36124 Eichenzell, Tel. ++49 (0) 6659 87300, Fax: ++49 (0) 6659 87155, e-mail [vertrieb@kcl.de](mailto:vertrieb@kcl.de)).
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Color** : Yellowish. Clear.
- Odor** : No discernible odor
- Odor threshold** : Not available.

**SECTION 9: Physical and chemical properties**

<b>pH</b>	: 5.9 [Conc. (% w/w): 1%]
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Closed cup: 114°C
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: 1.02 to 1.07
<b>Solubility(ies)</b>	: Soluble in the following materials: cold water and hot water.
<b>Dispersibility properties</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Dynamic (room temperature): 48 mPa·s Kinematic (room temperature): 0.466 cm <sup>2</sup> /s Kinematic (40°C): 0.158 cm <sup>2</sup> /s
<b>Explosive properties</b>	: Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
<b>Oxidizing properties</b>	: Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: No specific data.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**



**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
TROYSHIELD PA10	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
3-iodo-2-propynyl butylcarbamate	LC50 Inhalation Dusts and mists	Rat	0.67 g/m <sup>3</sup>	4 hours Respirable dust
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat - Female	1056 mg/kg	-
	LD50 Oral	Rat - Male	1795 mg/kg	-

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

Route	ATE value
Inhalation (dusts and mists)	6.768 mg/l

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
TROYSHIELD PA10	Skin - Irritant	Rabbit	-	-	-
	Eyes - Irritant	Rabbit	-	-	-
3-iodo-2-propynyl butylcarbamate	Eyes - Severe irritant	Rabbit	-	-	-

**Conclusion/Summary** : Not available.

**Sensitizer**

**Conclusion/Summary** : Not available.

**Mutagenicity**

Product/ingredient name	Test	Experiment	Result
3-iodo-2-propynyl butylcarbamate	-	Experiment: In vitro Subject: Bacteria	Negative

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Positive	-	Negative	Rabbit - Female	Oral: 50 mg/kg	13 days; 7 days per week
	Negative	-	Negative	Rabbit - Female	Oral: 20 mg/kg	13 days; 7 days per week

**Conclusion/Summary** : Not available.

**Teratogenicity**

Product/ingredient name	Result	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Negative - Oral	Rabbit - Female	50 mg/kg	-

**Conclusion/Summary** : Not available.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
3-iodo-2-propynyl butylcarbamate	Category 1	Inhalation	larynx

**Aspiration hazard**

Not available.

**SECTION 11: Toxicological information**

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.  
**Eye contact** : Causes serious eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation** : No specific data.  
**Ingestion** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking  
**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

Product/ingredient name	Result	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Sub-chronic NOAEL Oral	Rat	35 mg/kg	90 days
	Chronic NOAEL Oral	Rat	20 mg/kg	2 years
	Sub-chronic NOAEL Dermal	Rat	200 mg/kg	90 days
	Sub-acute NOAEL Oral	Rabbit - Male, Female	13 mg/kg	-
	Sub-chronic NOAEL Inhalation Vapor	Rat	1.16 mg/m <sup>3</sup>	90 days

**Conclusion/Summary** : Not available.

**General** : May cause damage to organs through prolonged or repeated exposure if inhaled. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
3-iodo-2-propynyl butylcarbamate	EC50 0.05 mg/l	Daphnia - Daphnia magna	21 days
	EC50 44 mg/l	Micro-organism	3 hours
	NOEC 0.0084 mg/l	Fish - Pimephales promelas - Larvae	35 days
	NOEC 0.049 mg/l	Fish - rainbow trout	96 hours
	Acute EC50 0.022 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 0.16 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.067 mg/l Acute NOEC 0.0046 mg/l	Fish - rainbow trout Algae - Scenedesmus subspicatus	96 hours 72 hours

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
3-iodo-2-propynyl butylcarbamate	OECD 301F	25 % - 28 days	1.03 gO <sub>2</sub> /g ThOD	30 mg/l Activated sludge

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
3-iodo-2-propynyl butylcarbamate	-	-	Readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
3-iodo-2-propynyl butylcarbamate	2.81	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**SECTION 13: Disposal considerations**European waste catalogue (EWC)

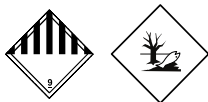
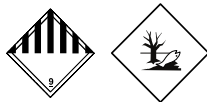
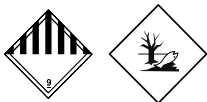
Waste code	Waste designation
16 03 05*	organic wastes containing hazardous substances

Packaging

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN3082	UN3082	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 3-iodo- 2-propynyl butylcarbamate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 3-iodo- 2-propynyl butylcarbamate). Marine pollutant (3-iodo-2-propynyl butylcarbamate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 3-iodo- 2-propynyl butylcarbamate)
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.
<b>14.6 Special precautions for user</b>	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
<b>Additional information</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <b>Emergency schedules</b> F-A, S-A	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorization****Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions** : Not applicable.  
**on the manufacture,  
 placing on the market  
 and use of certain  
 dangerous substances,  
 mixtures and articles**

**Other EU regulations**

**Priority List Chemicals** : Not determined

**Industrial emissions  
 (integrated pollution  
 prevention and control) -  
 Air** : Not listed

**Industrial emissions  
 (integrated pollution  
 prevention and control) -  
 Water** : Not listed

**National regulations**

**Product registration** : **Europe inventory:** All components are listed or exempted.  
**Australia inventory (AICS):** All components are listed or exempted.  
**China inventory (IECSC):** All components are listed or exempted.  
**Japan inventory (ENCS):** All components are listed or exempted.  
**Japan inventory (ISHL):** Not determined.  
**Korea inventory:** All components are listed or exempted.  
**Malaysia Inventory (EHS Register):** Not determined.  
**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.  
**Philippines inventory (PICCS):** All components are listed or exempted.  
**Taiwan Chemical Substances Inventory (TCSI):** All components are listed or exempted.  
**Thailand inventory:** Not determined.  
**Turkey inventory:** Not determined.  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Vietnam inventory:** Not determined.  
**Canada inventory:** All components are listed or exempted.

**Product registration  
 number** : -

**Denmark**

**MAL-code** : 00-3

**Germany**

**Hazard class for water** : 3

**Chemical Weapons  
 Convention List Schedule I  
 Chemicals** : Not listed

**Chemical Weapons  
 Convention List Schedule II  
 Chemicals** : Not listed

**Chemical Weapons  
 Convention List Schedule III  
 Chemicals** : Not listed

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms**

: ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Classification	Justification
Skin Irrit. 2, H315	On basis of test data
Eye Irrit. 2, H319	On basis of test data
Skin Sens. 1, H317	Calculation method
STOT RE 2, H373 (larynx) (inhalation)	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 2, H411	Calculation method

**Full text of abbreviated H statements**

: H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H319 Causes serious eye irritation.  
 H331 Toxic if inhaled.  
 H372 Causes damage to organs through prolonged or repeated exposure if (inhalation) inhaled.  
 H373 May cause damage to organs through prolonged or repeated exposure if (inhalation) inhaled.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]**

: Acute Tox. 3, H331 ACUTE TOXICITY (inhalation) - Category 3  
 Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4  
 Aquatic Acute 1, H400 AQUATIC HAZARD (ACUTE) - Category 1  
 Aquatic Chronic 1, H410 AQUATIC HAZARD (LONG-TERM) - Category 1  
 Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) - Category 2  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1  
 STOT RE 1, H372 (inhalation) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 1  
 STOT RE 2, H373 (inhalation) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 2

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**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.