# SAFETY DATA SHEET

arxada

TROYSHIELD PA10

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

### 1.1 Product identifier

**Product name** : TROYSHIELD PA10

**UFI** : 15J0-T0GC-H00D-YQ0V

**Product code** : 22872

**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

Fungicide for the metal-working industry.

**Identified uses**

Not applicable.

**Uses advised against**

Not applicable.

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

TROY CHEMICAL COMPANY BV
Poortweg 4C
2612PA Delft
The Netherlands
Phone: + 31 (0) 10 899 0142

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

### 1.4 Emergency telephone number

**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, Nagyvárad tér 2. +36-80-201199 (ingyenes, éjjel-nappal) +36-1-4766464 | Ireland: NPIC (8am to 10 pm daily): Phone 01-8092166 | Italy: Ospedale Niguarda Cà Granda, Milan 0266101029 | Lithuania: Poison centre: 236 20 52 |
| Netherlands: NVIC (medical personnel, 24/7): Tel: 088 755 8000 | 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: Slovensko: Národné toxikologické informačné centrum Limbova 5 833 05 Bratislava Tel. 02/5477 4166, 02/5477 4605 http://www.ntic.sk/ntic_en.php?adr=safetydata | Slovenia: Center za obveščanje 112 | Portugal: Centro de Informação Antivenenos: +351 800 250 250 |
| Sweden: 112 | Switzerland: Schweizerisches Toxikologisches Informationszentrum: +41 - 1-145 | Turkey: Not available. | United Kingdom (UK): NPIS 0870 600 6266 | Spain: INSTITUTO NACIONAL DE TOXICOLOGÍA 91 562 04 20 | Greece: Children's hospital "P. Kyriakou", Thivon & Levadias 1, GR 11527, Goudi, Athens Tel. +30 210 7793 777 |
| | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| Latvia: Valsts ugunsdzēsības un glābšanas dienests: 112, Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs, Hipokrāta 2, Rīga, Latvija, LV-1038; strādā 24 h diennaktī. Tel. nr. +371 67042473" | Croatia: Broj za izvanredna stanja: 112<br>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 21.318.36.06 (Disponibil in intervalul orar 8.00 – 16.00), Birou RSI si Informare Toxicologica din cadrul INSP, Str. D.Leonte Nr. 1-3, Bucuresti, Romania |
| Luxembourg: Centre Antipoisons / Giftinformationszentrum, Tel.: (+352) 8002 5500) | Cyprus: 1401 | Malta: Medicines and Poisons Information Service at Mater Dei Hospital (MDH) +356 2545 6508<br>Emergency number: 112 | | | |

**Supplier**

**Emergency telephone number (24/7)** : +1 703-741-5970 (EN)

# 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

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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 skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure. (larynx) (inhalation)
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. Wash thoroughly after handling.

**Response** : Get medical advice or attention if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**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

## SECTION 2: Hazards identification

**Supplemental label elements** : Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : 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

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| propanol, oxybis- | REACH #: 01-2119456811-38<br>EC: 246-770-3<br>CAS: 25265-71-8 | 40 - 75 | Not classified. | - | [2] |
| 3-iodo-2-propynyl butylcarbamate | REACH #: Biocide<br>EC: 259-627-5<br>CAS: 55406-53-6<br>Index: 616-212-00-7 | <10 | Acute Tox. 4, H302<br>Acute Tox. 3, H331<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT RE 1, H372 (larynx) (inhalation)<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410<br>**See Section 16 for the full text of the H statements declared above.** | ATE [Oral] = 1056 mg/kg<br>ATE [Inhalation (dusts and mists)] = 0.67 mg/l<br>M [Acute] = 10<br>M [Chronic] = 1 | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

# 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 with plenty of soap and water. 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. 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.

**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

**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

**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. Warehousing: All materials except Oxidizers can be extinguished by replacing the available air with CO2 when a stationary CO2 installation is installed.

**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 protective actions 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.

## SECTION 6: Accidental release measures

**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).

### 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.

**Seveso Directive - Reporting thresholds**

**Danger criteria**

| Category | Notification and MAPP threshold | Safety report threshold |
|---|---|---|
| E1 | 100 tonne | 200 tonne |

### 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. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

**Occupational exposure limits**

No exposure limit value known.

**Occupational exposure limits**

**Europe**

No exposure limit value known.

**Germany**

## SECTION 8: Exposure controls/personal protection

propanol, oxybis-

**DFG MAC-values list (Germany, 7/2018).**
PEAK: 200 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction
TWA: 100 mg/m³ 8 hours. Form: inhalable fraction
**TRGS 900 OEL (Germany, 6/2018).**
TWA: 100 mg/m³ 8 hours. Form: inhalable fraction
PEAK: 200 mg/m³ 15 minutes. Form: inhalable fraction

3-iodo-2-propynyl butylcarbamate

**DFG MAC-values list (Germany, 10/2021). Skin sensitizer.**
PEAK: 0.116 mg/m³, 4 times per shift, 15 minutes.
PEAK: 0.01 ppm, 4 times per shift, 15 minutes.
TWA: 0.058 mg/m³ 8 hours.
TWA: 0.005 ppm 8 hours.
**TRGS 900 OEL (Germany, 7/2021). Skin sensitizer.**
PEAK: 0.116 mg/m³ 15 minutes.
PEAK: 0.01 ppm 15 minutes.
TWA: 0.058 mg/m³ 8 hours.
TWA: 0.005 ppm 8 hours.

### Slovenia

3-iodo-2-propynyl butylcarbamate

**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021).**
KTV: 0.01 ppm, 4 times per shift, 15 minutes.
TWA: 0.005 ppm 8 hours.
KTV: 0.116 mg/m³, 4 times per shift, 15 minutes.
TWA: 0.058 mg/m³ 8 hours.

### Switzerland

propanol, oxybis-

**SUVA (Switzerland, 1/2018).**
STEL: 280 mg/m³ 15 minutes. Form: Inhalable fraction
TWA: 140 mg/m³ 8 hours. Form: Inhalable fraction
TWA: 140 mg/m³ 8 hours. Form: vapour and aerosols
STEL: 280 mg/m³ 15 minutes. Form: vapour and aerosols

3-iodo-2-propynyl butylcarbamate

**SUVA (Switzerland, 1/2021). Skin sensitizer.**
STEL: 0.24 mg/m³ 15 minutes. Form: vapour and aerosols
STEL: 0.02 ppm 15 minutes. Form: vapour and aerosols
TWA: 0.01 ppm 8 hours. Form: vapour and aerosols
TWA: 0.12 mg/m³ 8 hours. Form: vapour and aerosols

**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.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs 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. (EN166) 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. Wear suitable gloves tested to EN374. 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).

**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. (EN343)

**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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

## 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state** : Liquid.

**Color** : Yellowish. Clear.

**Odor** : No discernible odor

**Odor threshold** : Not available.

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** : Not available.

**Flammability** : Not available.

**Lower and upper explosion limit** : Not available.

**Flash point** : Closed cup: 114°C (237.2°F)

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| propanol, oxybis- | 310 | 590 | |

**Decomposition temperature** : Not available.

**pH** : 5.9 [Conc. (% w/w): 1%]

**Viscosity** : Dynamic (room temperature): 48 mPa·s
Kinematic (room temperature): 46.6 $mm^2/s$
Kinematic (40°C): 15.8 $mm^2/s$

**Solubility(ies)** :

| Media | Result |
|---|---|
| cold water | Soluble |
| hot water | Soluble |

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

**Vapor pressure** :

| | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | |
|---|---|---|---|---|---|---|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| propanol, oxybis- | 0.01 | 0.0013 | | | | |
| 3-iodo-2-propynyl butylcarbamate | <0.00002 | <0.0000027 | | | | |

**Relative density** : 1.02 to 1.07

**Density** : 1.02 to 1.07 g/cm³ [25°C (77°F)]

**Vapor density** : Not available.

**Explosive properties** : 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.

**Oxidizing properties** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : No specific data.

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity**

| 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/m³ | 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**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| TROYSHIELD PA10 | N/A | N/A | N/A | N/A | 6.8 |
| 3-iodo-2-propynyl butylcarbamate | 1056 | 2005 | N/A | N/A | 0.67 |

**Irritation/Corrosion**

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

**Conclusion/Summary** : Not available.

**Sensitization**

**Conclusion/Summary** : Not available.

**Mutagenicity**

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

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

## SECTION 11: Toxicological information

### Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|---|---|---|---|---|---|---|
| 3-iodo-2-propynyl butylcarbamate | 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.

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

### Potential acute health effects

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

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

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

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

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

**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

**Ingestion** : No specific data.

### 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.

# SECTION 11: Toxicological information

**Potential delayed effects** : Not available.

**Potential chronic health effects**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| 3-iodo-2-propynyl butylcarbamate | Sub-chronic NOAEL Dermal | Rat | 200 mg/kg | 90 days |
| | Sub-acute NOAEL Oral | Rabbit - Male, Female | 13 mg/kg | - |
| | Chronic NOAEL Oral | Rat | 20 mg/kg | 2 years |
| | Sub-chronic NOAEL Oral | Rat | 35 mg/kg | 90 days |
| | Sub-chronic NOAEL Inhalation Dusts and mists | Rat | 1.16 mg/m³ | 90 days |

**Conclusion/Summary** : Not available.

**General** : May cause damage to organs through prolonged or repeated exposure if inhaled. 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.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 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 | Fish - rainbow trout | 96 hours |
| | Acute NOEC 0.0046 mg/l | Algae - Scenedesmus subspicatus | 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 $gO_2/g$ ThOD | 30 mg/l Activated sludge |

**Conclusion/Summary** : Not available.

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

# SECTION 12: Ecological information

## 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| 3-iodo-2-propynyl butylcarbamate | 2.81 | - | low |

## 12.4 Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Mobility** : Not available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 12.6 Endocrine disrupting properties

Not available.

## 12.7 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.

### European waste catalogue (EWC)

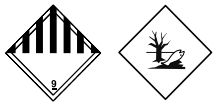
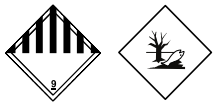
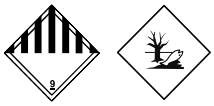
| Waste code | Waste designation |
|---|---|
| 16 03 05* | organic wastes containing hazardous substances |

### 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 |
|---|---|---|---|
| **14.1 UN number or ID number** | UN3082 | UN3082 | UN3082 |
| **14.2 UN proper shipping name** | 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) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 3-Iodo- 2-propynyl butylcarbamate) |
| **14.3 Transport hazard class(es)** | 9 M6  | 9  | 9  |
| **14.4 Packing group** | III | III | III |
| **14.5 Environmental hazards** | Yes. | Yes. | Yes. |

**Additional information**

**ADR/RID** : 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.
**Tunnel code** -

**IMDG** : 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.
**Emergency schedules** F-A, S-F

**IATA** : 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.

**14.6 Special precautions for user** : **Transport within user's premises:** 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.

**14.7 Maritime transport in bulk according to IMO instruments** : 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**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

## SECTION 15: Regulatory information

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

**Other EU regulations**

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

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

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria**

| Category |
| --- |
| E1 |

**National regulations**

**Biocidal products regulation**

**Product type** : Liquid.

Avoid exposure. After accidental exposure, seek immediate medical attention. Do not induce vomiting.

Product waste and emptied containers should be disposed of in accordance with local waste regulations. Do not reuse container.

**Expiry date** : Not available.

Do not allow to enter drains or watercourses.

**Denmark**

**MAL-code** : 00-3

**Germany**

**Storage class (TRGS 510)** : 10

**Hazard class for water** : 3

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

## SECTION 15: Regulatory information

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

| | | |
|---|---|---|
| **Australia** | : | All components are listed or exempted. |
| **Canada** | : | All components are listed or exempted. |
| **China** | : | **CHINA INVENTORY (IECS):** All components are listed or exempted. |
| **Eurasian Economic Union** | : | **Russian Federation inventory**: Not determined. |
| **Japan** | : | **Japan inventory (CSCL)**: All components are listed or exempted.<br>**Japan inventory (ISHL)**: Not determined. |
| **New Zealand** | : | All components are listed or exempted. |
| **Philippines** | : | All components are listed or exempted. |
| **Republic of Korea** | : | All components are listed or exempted. |
| **Taiwan** | : | All components are listed or exempted. |
| **Thailand** | : | Not determined. |
| **Turkey** | : | Not determined. |
| **United States** | : | All components are listed or exempted. |
| **Viet Nam** | : | Not determined. |

**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]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

### 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

## SECTION 16: Other information

| | |
|---|---|
| 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. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | AQUATIC HAZARD (ACUTE) - Category 1 |
| Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITIZATION - Category 1 |
| STOT RE 1 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

**Date of printing** : May 08, 2023.

**Date of issue/ Date of revision** : December 21, 2022.

**Date of previous issue** : No previous validation.

**Version** : 3.01

**Notice to reader**

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**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.**