

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/28/2008

Reviewed on 10/06/2008

1 Identification of substance

- **Product details**
- **Trade name:** ACTICIDE IPS 20U
- **Application of the substance / the preparation** Biocide
- **Supplier:**
Thor Specialties, Inc.
56 Quarry Road
Trumbull, CT 06611
USA
- **Information department:**
Biocide Department
Phone: +1 203 3656530
Fax: +1 203 3656537
E-Mail: info@thorsp.com
- **Emergency information:**
Emergency phone number (worldwide 24 hrs service): +49 6 21 60-4 33 33
USA: In case of emergency call CHEMTREC 24 Hours at 800/424-9300

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Fungicide based on 3-iodo-2-propynyl-butylcarbamate.

· **Dangerous components:**

55406-53-6	3-iodo-2-propynyl-butylcarbamate	20%
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3 Hazards identification

· **Hazard description:**



Harmful
Dangerous for the environment

· **Information pertaining to particular dangers for man and environment:**

- Harmful by inhalation.
- Irritating to eyes and skin.
- May cause sensitization by skin contact.
- Very toxic to aquatic organisms.
- Vapours may cause drowsiness and dizziness

· **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 1
Reactivity = 0

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These are recommended ratings. It is the responsibility of the employer to evaluate products and train employees on the hazards of those products prior to use.

4 First aid measures

- **General information:**

In case of emergency call toll free (800) 424-9300. Have the product container or label with you when you call a Poison Control Center or doctor or going for treatment.

- **If inhaled:**

Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Call a Poison Control Center or doctor for treatment advice.

- **If on skin or clothing:**

Rinse skin immediately with plenty of water for 15 to 20 minutes.

Call a Poison Control Center or a doctor for treatment advice.

- **If in eyes:**

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a Poison Control Center or doctor for treatment advice.

- **If swallowed:**

Have person sip a glass of water if able to swallow.

Do not induce vomiting unless told to do so by the Poison Control Center or doctor.

Call a Poison Control Center or doctor immediately for treatment advice.

Do not give anything by mouth to an unconscious person.

- **Note to physician:**

- **The following symptoms may occur:**

Chronic overexposure can cause damage to kidneys, blood, nerves, liver and lung. Persons with severe skin, liver, kidney or breathing problems should avoid use.

5 Fire fighting measures

- **Suitable extinguishing agents:** Water spray jet, extinguishing powder, CO₂, foam.

- **For safety reasons unsuitable extinguishing agents:** None

- **Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, toxic incineration products may be released such as:

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Iodine vapours

- **Protective equipment:** Wear protective clothing and self-contained respiratory protective device.

- **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**

Wear protective clothing.

Keep unprotected persons away.

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When selecting the protective suit it has to be paid attention to a complete and safe protection of skin and mucous membrane. Impermeable protective clothes, protective boots made of neoprene, complete face protection, nitrile-rubber-gloves with long tops.

Measures for environmental protection:

As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.

Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).

Inform respective authorities in case of seepage into water course or sewage system.

Measures for cleaning/collecting:

Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.

Suitable binder: multi-purpose absorbent.

Dispose of contaminated binding material in accordance with local, state and federal regulations.

7 Handling and storage

Handling:**Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Handle product in closed systems preferably.

Decant carefully, avoid splashes.

Compliance with the minimum requirements designed to guarantee a better standard of safety and health at work is essential to ensure the safety and health of workers.

Information about protection against explosions and fires: No special measures required.**Storage:****Requirements to be met by storerooms and receptacles:** Use polyolefine receptacles.**Information about storage in one common storage facility:** Store away from oxidizing agents.**Further information about storage conditions:**

Keep receptacle tightly sealed.

Prevent release to the environment by adequate secondary containment design and use of appropriate spill control procedures.

8 Exposure controls and personal protection

Additional information about design of technical systems: No further data; see item 7.**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

Avoid close or long term contact with the skin.

Avoid contact with the eyes.

Do not inhale gases / fumes / aerosols.

Wash hands thoroughly before breaks and at the end of work.

Breathing equipment:

Use breathing protection with high concentrations for example when exceeding the air limiting value.

Filter A/P2

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· **Protection of hands:**



Chemical protective gloves according to DIN EN 374 with CE-labelling.

Before use check protective gloves for any damages like holes, cuts or tears.

· **Material of gloves** Nitrile rubber, NBR

· **Penetration time of glove material**

Penetration time depends on different criteria and may be determined by the manufacturer according to the norm DIN EN 374-3.

· **Not suitable are gloves made of the following materials:** Leather gloves

· **Eye protection:**



Goggles or face shield

· **Body protection:** Protective work clothing

* **9 Physical and chemical properties**

· **General Information**

Form:	Liquid
Color:	White to Yellow
Odor:	Mild

· **Change in condition**

Melting point/Melting range: Not determined
Boiling point/Boiling range: 160°C (320°F)

· **Flash point:** > 110°C (> 230°F)

· **Ignition temperature:** 310°C (590°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower:	0.6 Vol %
Upper:	12.6 Vol %

· **Vapor pressure at 20°C (68°F):** 1 hPa (1 mm Hg)

· **Density at 20°C (68°F):** ca. 1.042 g/cm³

· **Solubility in / Miscibility with**

Water: Partly miscible.

· **pH-value at 20°C (68°F):** ca. 4.7

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
Protect against temperatures > 40 °C.
Before handling, the product should not be diluted or mixed with other chemicals, in order to avoid any negative influences on the active ingredient(s).
- **Minimum shelf life:** 24 months from production date, if stored at a temperature of about 20°C
- **Materials to be avoided:** Strong oxidising agents
- **Dangerous reactions** Reacts with oxidizing agents.
- **Dangerous products of decomposition:**
None, if storage and handling is done according to specification.

11 Toxicological information

- **Acute toxicity:**

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

Oral	LD50	3250 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rat) Single dose dermal LD 50 has not been determined. LD 50 based on information for components.
Inhalative	LC50 / 4 h	1.17 mg/l (rat) Single dose LC 50 has not been determined. LC 50 based on information for the active ingredient.

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Slightly irritant
- **Sensitization:** Sensitizing effect on skin of guinea pigs (EPA FIFRA 81-6).

12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Method:** OECD 302B (Zahn-Wellens-Test), 28 d
- **Analyzing method:** COD-elimination
- **Degree of elimination:**
> 70 %
The product ingredients can be readily eliminated in the sewage system.
- **Biodegradability:** The components are readily biodegradable.
- **Behavior in environmental systems:**
- **Mobility and bioaccumulation potential:**
Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
log Pow 2.45; IPBC
Bio concentration factor (BCF): 16-36
- **Ecotoxic effects:**

- **Acquatic toxicity:**

EC50 / 48 h	< 1 mg/l (Daphnia)
EC50 / 72 h	< 1 mg/l (Desmodemus subspicatus)

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LC50 / 96 h	1-10 mg/l (Brachydanio rerio)
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· Behavior in sewage processing plants:

EC50	ca. 220 mg/l (Activated Sludge)
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· **Remark:** Depending on concentration, toxic effects on activated sludge organisms are possible.

· **Additional ecological information:**

· **AOX-indication:**

Can affect the AOX-value of the effluent water.

Calculated AOX value: ca. 2.5 %

· **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11 EC:**

None

· **General notes:**

The product contains materials that are harmful to the environment.

Avoid transfer into the environment.

13 Disposal considerations

· **Product:**

· **Recommendation:**

Dispose in accordance with applicable Federal and Local regulations.

Biocide or Pesticide wastes are acutely hazardous. Improper disposal or excess product or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Biocide/Pesticide or Environmental Control Agency, or the Hazardous Waste representative at your nearest EPA Regulation Office for guidance.

· **Uncleaned packagings:**

· **Recommendation:** In accordance with label and federal and local regulations.

14 Transport information

· **US DOT Ground Transport Hazard Class:** 9

· **Identification number:** UN3082

· **Packing group:** III

· **Proper shipping name (technical name):** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-iodo-2-propynyl butylcarbamate)

· **Label:** 9

· **Land transport ADR/RID (cross-border):**



· **ADR/RID class:** 9 (M6) Miscellaneous dangerous substances and articles

· **Danger code (Kemler):** 90

· **UN-Number:** 3082

· **Packaging group:** III

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· **Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-iodo-2-propynyl-butylcarbamate)

· **Maritime transport IMDG:**



· **IMDG Class:** 9
 · **UN Number:** 3082
 · **Label:** 9
 · **Packaging group:** III
 · **EMS Number:** F-A,S-F
 · **Marine pollutant:** No
 · **Propper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-iodo-2-propynyl butylcarbamate)

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 9
 · **UN/ID Number:** 3082
 · **Label:** 9
 · **Packaging group:** III
 · **Propper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-iodo-2-propynyl butylcarbamate)
 · **Remarks:** Packing Instructions / max. net weight
 Passenger aircraft: 914 / 450 L
 Cargo aircraft: 914 / 450 L

15 Regulations

· **EPA-Registration number:** 72304-7-67071
 · **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredient is listed.

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

55406-53-6 | 3-iodo-2-propynyl-butylcarbamate

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

All ingredients are listed.

· **Canadian Domestic Substances List (DSL/NDL):**

All ingredients are listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Product related hazard information:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:Harmful
Dangerous for the environment**· Risk phrases:**Harmful by inhalation.
Irritating to eyes and skin.
May cause sensitization by skin contact.
Very toxic to aquatic organisms.
Vapours may cause drowsiness and dizziness**· Safety phrases:**In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear eye/face protection.
This material and its container must be disposed of in accordance with federal (RCRA), state and local regulations.
Avoid release to the environment. Refer to special instructions/Safety data sheets**16 Other information**

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

· Training hints

Further information under the regulations of use can be taken from the Product Data Sheet and label.

· Department issuing MSDS: Regulatory Affairs Department**· Contact:** Lynn P. Tordo, E-Mail: ltordo@thorsp.com**· * Data compared to the previous version altered.**