



## SAFETY DATA SHEET

### TORPEDO 050 EC

Issue date: 14.09.2017

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### Product identifiers

Product name: Torpedo 050 EC  
Chemical name: Chlorfluazuron  
CAS No.: 71422-67-8

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

Identified uses: Insecticide for agricultural use

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

Producer: Almandine Corporation SA  
Gotthardstrasse 3  
6300 Zug  
Switzerland  
Tel: +44 20 8995 8391 (UK office)  
Fax: +44 20 8995 7639  
Email: [almuk@almandine.com](mailto:almuk@almandine.com)  
Formulator site: Agrosmart Ltd  
Huddersfield , UK

##### Emergency telephone number

Tel: +44 20 8995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri only, UK)

#### SECTION 2: HAZARDS IDENTIFICATION

Asp. tox. 1  
Skin irrit. 2  
Eye irrit. 2  
STOT SE 3  
Aq. Chronic 2



Pictogram(s):

Signal word: Danger

H-statement(s):  
**H304:** May be fatal if swallowed and enters airways  
**H315:** Causes skin irritation  
**H319:** Causes serious eye irritation  
**H335:** May cause respiratory irritation  
**H336:** May cause drowsiness or dizziness  
**H411:** Toxic to aquatic life with long lasting effects

##### P statement(s):

**P260:** Do not breathe fumes/ gas/ mist/vapours/ spray  
**P280:** Wear protective gloves/clothing/eye protection/face protection



**P301+P310:** IF SWALLOWED: Immediately call a POISON CENTER/doctor  
**P304+P340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing  
**P312:** Call a POISON CENTER or doctor if you feel unwell  
**P501:** Dispose of contents/container in accordance with local/regional/regulations

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredients	CAS Number	Concentration (g/L)	Signal word	H-statements
Chlorfluazuron	71422-67-8	50	Warning	H400, H410
Surfactants	mixture	<100	Danger	H226, H315, H318, H335, H336
Ultra-low-naphthalene aromatic 150 solvent	64742-95-6	>500	Danger	H304, H315, H319, H335, H411

**SECTION 4: FIRST AID MEASURES**

If poisoning occurs, immediately contact a doctor or Poisons Information Centre and follow the advice given. Show this Safety Data Sheet to the doctor.

**Eye contact:** Irrigate with eyewash solution or clean water, holding eyelids apart, for at least 15 minutes. Obtain medical attention if effect persists.

**Skin contact:** Remove all contaminated clothing. Wash skin immediately with water, followed by soap and water, to minimise contact with skin.

**Inhalation:** Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.

**Ingestion:** If swallowed, seek medical advice immediately and show the container, label or this data sheet, if possible. Do not induce vomiting.

**Medical advice:** Observe the patient and treat symptomatically. If gastric lavage is considered necessary, prevent aspiration of gastric material. Consider administration of activated charcoal and a laxative.

**SECTION 5: FIRE FIGHTING MEASURES**

Keep fire-exposed containers cool by spraying with water.

**Extinguishing media:** For small fires, use foam, carbon dioxide or dry powder extinguisher. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

**Advice for fire fighters:** Fire-fighters should wear full protective gear, including self-contained breathing apparatus.

Bund area with sand or earth to prevent contamination of drains and/or waterways. Dispose of fire control water or other extinguishing agent and spillage safely.



#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

- Personal precautions:** Wear PPE as recommended in section 8. Ensure suitable personal protection during removal of spillages. Wear a face mask that gives protection against organic vapours, wear eye protection, chemically resistant gloves, boots and coveralls.
- Environmental precautions:** Prevent product from entering drains or water courses. Warn the local water authority if water-courses become contaminated.
- Clean-up methods:** Adsorb spillages onto sand, earth or any suitable adsorbent material. Wash the spillage area with water. Washings must be prevented from entering surface water drains. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations.

#### **SECTION 7: HANDLING AND STORAGE**

- Handling:** Use PPE as outlined in section 8. Do not eat drink or smoke while using this product. Avoid contact with skin and eyes. Avoid inhalation of high concentrations of vapours. When spraying, avoid contact with spray. When using, do not eat, drink or smoke. Wash face and hands before drinking, eating or smoking.
- Storage:** Keep in original containers, tightly closed, out of reach of children. Keep away from heat and sources of ignition. Keep away from food, drink and animal feeding stuffs.
- Storage life:** Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.
- Incompatibility:** None known.

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

- Occupational Exposure limits:** Mixed hydrocarbon solvents OES/HSE  
8 hr TWA 200 mg/m<sup>3</sup>  
(Manufacturer/supplier's calculation)
- Engineering controls:** Use with adequate ventilation. Local exhaust ventilation is recommended to keep levels below the exposure limits.
- Personal protective equipment:** When handling wear working shoes, working clothes or lab coat. Work in a well-ventilated area. In addition: wear mask and filter for organic compounds type A, gloves, safety goggles.
- Respiratory protection:** Wear appropriate vapour respirator when ventilation is inadequate.



**In case of emergency:** Full protective gear and a self-contained breathing apparatus should be used, according to the severity.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

a) Appearance:	Pale yellow/ brown transparent liquid
b) Odour:	Aromatic
c) Odour threshold:	None set
d) pH:	Not determined
e) Melting point/freezing point:	Not measured
f) Boiling point/boiling range:	Not measured
g) Flash-point:	63°C
h) Evaporation rate:	Not measured
i) Flammability (solid/gas):	Not flammable
j) Upper/lower flammability or explosive limits:	None set
k) Vapour pressure:	1.6 x 10 <sup>-3</sup> mPa (20°C) (tech.)
l) Vapour density:	Not determined
m) Relative density:	0.930 – 0.954 g/ml (20°C)
n) Solubility:	0.016 mg/L (water, 20°C) (tech.)
o) Partition coefficient:	Log P <sub>ow</sub> 5.8 (tech.)
p) Auto-ignition temperature:	Not determined
q) Decomposition temperature:	Not determined
r) Viscosity:	Not relevant
s) Explosive properties:	Not explosive
t) Oxidising properties:	Not an oxidiser

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	Stable under normal conditions of use. Will not polymerise.
<b>Chemical stability</b>	The product is stable if stored and handled as prescribed /indicated.
<b>Possibility of hazardous reactions</b>	No hazardous reactions when stored and handled according to instructions.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Oral toxicity:</b>	LD <sub>50</sub> rat: >2500 mg/kg (GHS unclassified)
<b>Dermal toxicity:</b>	LD <sub>50</sub> rat: >2000-5000mg/kg (GHS unclassified)
<b>Inhalation toxicity:</b>	LC <sub>50</sub> rat (4 h) >2.4 mg/L (technical material)
<b>Skin irritation:</b>	Mild irritant



**Eye irritation:** Irritant  
**Skin sensitisation:** Sensitiser  
**WHO Toxicity classification:** U; unlikely to be hazardous

**SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity** (technical material):

<b>Bird toxicity:</b>	LD <sub>50</sub> Mallard duck	>2510 mg/kg
<b>Fish toxicity:</b>	LC <sub>50</sub> 96 h <i>Cyprinidae</i> LC <sub>50</sub> 96 h Bluegill sunfish	>300 mg/L >11.071 mg/L
<b>Daphnia toxicity:</b>	EC <sub>50</sub> 48 h <i>Daphnia magna</i>	0.000908 mg/L
<b>Algal toxicity:</b>	EC <sub>50</sub> Green algae 72 h	>1.8 mg/L
<b>Bee toxicity:</b>	LD <sub>50</sub> (48 h) – oral	>100 µg/bee

Chlorfluazuron is practically not harmful to bees and birds.

**SECTION 13: DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Product:** Dispose of waste product through an official waste contractor. Obtain advice from local waste regulation authority.

**Contaminated packaging:** Triple- or pressure-rinse containers before disposal. Add rinsings to spray tank.  
Do not dispose of undiluted chemicals on-site.  
Do not burn empty containers. Recycle, or return to supplier through local schemes if applicable. Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORTATION INFORMATION**

<b>UN number:</b>	3082		
<b>UN Proper Shipping Name:</b>	Environmentally hazardous substance, liquid, N.O.S. (contains chlorfluazuron 5%)		
<b>Transport hazard class:</b>	ADR/RID: 9	IMDG: 9	IATA: 9
<b>Packaging group:</b>	ADR/RID: III	IMDG: III	IATA: III
<b>Environmental hazard:</b>	ADR/RID: Yes	IMDG: Marine pollutant: Yes	IATA: Yes

**SECTION 15: REGULATORY INFORMATION**

No additional regulatory information required for this product.



**SECTION 16: OTHER INFORMATION**

**H-Statements:**

- H226 Flammable liquid and vapour
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H318 Causes serious eye damage
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- 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

TWA: Time weighted average: average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's handling of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.

Sections 9, 11 and 12 based on available EU and Almandine SA Corporation data.  
Self-classification of mixture.