

SAFETY DATA SHEET

TIPTOP 100 EC

SDS/GHS/Isr/V2.3

Revision date: 11.10.2021

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

Product identifiers

Product name: Chemical name: CAS No.: TIPTOP 100 EC Clodinafop-propargyl 100 g/l + Cloquintocet-mexyl 25 g/l 105512-06-9 and 99607-70-2

Relevant identified uses of the substance or mixture and uses advised against Identified uses: Herbicide for agricultural use

Supplier of Safety Data Sheet:

Almandine Corporation SA Gotthardstrasse 3 6300 Zug Switzerland UK Liaison Office: Tel: +44 20 8995 8391 (Office hours 9 am-5 pm UK time) Fax: +44 20 8995 7639 Email: <u>almuk@almandine.com</u>

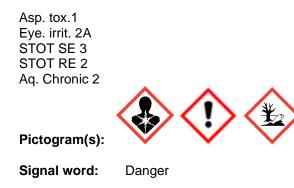
Formulation sites:

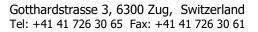
a. Agrosmart UK LTD Clayton West Huddersfield West Yorkshire UK b. Aydin Kimya Sanayi Ve Tikaret A.Ş. Velikoy OSB 7 Cadde No: 5/1 Cerkezkoy Turkey

Emergency telephone number

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

SECTION 2: HAZARDS IDENTIFICATION







Almandine Corporation SA

Email: almch@almandine.com

Hazard statement(s):

- **H304:** May be fatal if swallowed and enters airways
- H319: Causes serious eye irritation
- H336: May cause drowsiness or dizziness
- **H373:** May cause damage to organs through prolonged or repeated exposure
- H411: Toxic to aquatic life with long lasting effects

Precautionary 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/national regulation

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredients | CAS Number | Concentration (g/L) | Signal word | H-Statements |
|-----------------------------------|-------------|------------------------|-------------|------------------------------------|
| Clodinafop- propargyl | 105512-06-9 | 100 | Warning | H302, H317, H373, H400, H410 |
| Cloquintocet- mexyl | 99607-70-2 | 25 | Warning | H317, H400, H410 |
| Solvent Naphtha (petroleum ND) | 64742-94-5 | >500 | Danger | H304, H336, H411 |
| Naphthalene | 91-20-3 | <1 | Danger | H302, H351, H410 |

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.

| Ingestion: | Seek immediate medical attention. Wash out mouth with water. Do not induce vomiting. |
|--------------------------|--|
| Skin contact: | Remove all contaminated clothes and footwear immediately. Wash immediately with plenty of soap and water. |
| Eye contact: | Rinse with water for 15 minutes. Remove contact lenses and continue rinsing. Seek medical advice. |
| Inhalation: | Remove person to fresh air and keep comfortable for breathing. Keep warm and at rest, seek immediate medical attention. |
| Most important symptoms: | Nausea, vomiting, stomach-ache, headache, convulsions. Aspiration may cause pulmonary oedema and pneumonitis. |
| Treatment: | Treat symptomatically. No known antidote. If vomiting occurs, keep head below hips to prevent aspiration. |



| Extinguishing media: | CTION 5: FIRE FIGHTING MEASURES Water fog, fine water spray, foam, dry chemical, carbon dioxide. |
|----------------------------|---|
| Exunguishing media. | Do not use water jet. |
| Hazards from combustion pr | oducts: |
| | Combustion products are toxic and/or irritant. Fire will produce dense black smoke. Flash-back possible over a considerable distance. |
| | Nitrogen oxides, sulphur dioxide, hydrogen chloride, hydrogen cyanide, and carbon monoxide. |
| Advice for fire fighters: | Fire-fighters should wear full protective gear, including self- contained breathing apparatus. Keep unnecessary people away. Use water spray to cool containers. |
| | Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely. |
| SECTIO | N 6: ACCIDENTAL RELEASE MEASURES |
| | |
| Personal precautions: | Wear PPE as recommended in section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away. |
| Environmental precautions: | Prevent product from entering drains or water courses. Warn the local water authority if water-courses become contaminated. |
| Clean-up methods: | Pick up and arrange disposal without creating aerosol. Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment by washing areas with water. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations. |
| SE | CTION 7: HANDLING AND STORAGE |
| | |
| Handling: | Keep out of reach of children. Avoid breathing vapour or spray. Avoid contact with skin or eyes and clothing. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. |
| Storage: | Store in a cool, well-ventilated area in the closed original container, away from direct sunlight and sources of ignition. Protect from heat and humidity. Prevent contamination of ground and water courses. |
| Incompatibility: | None known. |



Flammability:

Not flammable under normal conditions of use. The product may sustain combustion.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| Occupational Exposure limits: | | |
|--------------------------------|---|--|
| | Clodinafop-propargyl 1 mg/m ³ TWA Cloquintocet-mexyl 10 mg/m ³ TWA Aromatic solvent 100 mg/m ³ TWA | |
| Engineering controls: | Use with adequate ventilation. Local exhaust ventilation is recommended to keep levels below the exposure limits. | |
| Personal protective equipment: | Wear face shield or goggles. Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots. Wear elbow length butyl rubber gloves. | |
| | If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours. After each day's use, wash gloves, goggles or face shield, | |
| | respirator if worn, and contaminated clothing. | |

Do not re-enter treated areas without protective clothing until spray residue has dried.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| a) b) c) d) e) f) | Appearance: Odour: Odour threshold: pH: Melting point/freezing point: Boiling point/boiling range: | Yellow brown liquid virtually odourless none set 5.0 – 8.0 (1% dilution) Not determined Not determined |
|----------------------------------|--|---|
| g) | Flashpoint: | >62°C (CC) |
| h) | Evaporation rate: | Not measured |
| i) | Flammability (solid/gas): | Not flammable |
| j) | Upper/lower flammability | |
| | or explosive limits: | None set |
| k) | Vapour pressure: | 2.79 x 10 ⁻⁴ mPa (Clodinafop tech.) 5.31 x 10 ⁻³ mPa (Cloquintocet tech.) |
| I) | Vapour density: | 3 x 10 ⁻⁷ Pa m ³ mol ⁻¹ (Clodinafop tech.) 3.02 x 10 ⁻³ Pa m ³ mol ⁻¹ (cloquintocet tech.) |
| m) | Relative density: | 1.008 – 1.016 g/mL (25°C) |
| n) | Solubility: | Miscible |
| | | 4.0 mg/L (water, 20°C) (Clodinafop tech.) 0.23 mg/L (water, 20°C) (cloquintocet tech.) |
| o) | Partition coefficient: | Log P _{ow} 3.9 (Clodinafop tech.) Log P _{ow} 5.03 (Cloquintocet tech.) |
| p) q) r) s) t) | Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidising properties: | Not determined Not determined 13.4 mPa at 24°C Not explosive Not an oxidiser |



| SECTION 10: STABILITY AND REACTIVITY | | |
|--|--|--|
| Reactivity | Stable under normal conditions of use. Will not polymerise. | |
| Chemical stability | The product is stable if stored and handled as prescribed /indicated. | |
| Possibility of hazardous reactions No hazardous reactions when stored and handled according to instructions. | | |
| Conditions to avoid | Sources of ignition and extreme heat. | |
| Incompatible materials | None known. | |
| Hazardous decomposition Products: | Does not decompose at ambient temperature. Combustion or thermal decomposition will evolve toxic and irritant vapours. | |

SECTION 11: TOXICOLOGICAL INFORMATION

| Oral toxicity: | LD_{50} rat: >2000-5000 mg/kg (GHS Cat 5) |
|----------------------|---|
| Dermal toxicity: | LD_{50} rat: >2000- 5000 mg/kg (GHS Cat 5) |
| Inhalation toxicity: | LC_{50} rat 4 h >3.5 mg/L (comparable formulation) |
| Skin irritation: | Not irritating |
| Eye irritation: | Irritant (reversible effects on eyes Cat 2A) |
| Skin sensitisation: | Not a skin sensitiser |
| Long-term exposure: | No long-term risks to man are associated with the normal handling and use of this material. |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (comparable formulation)

| Fish toxicity: | LC ₅₀ 96 h rainbow trout | 3.6 mg/L |
|-------------------|-------------------------------------|----------|
| Daphnia toxicity: | EC50 48 h <i>Daphnia magna</i> | 9.5 mg/L |

Clodinafop-propargyl and cloquintocet-mexyl are not persistent in soil or water. Clodinafop-propargyl has low mobility in soil. Cloquintocet-mexyl is immobile in soil. Clodinafop-propargyl and cloquintocet-mexyl do not bioaccumulate.

Virtually non toxic to bees

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

| UN number: | 3082 | | |
|--------------------------|--|-----------------------------|-----------|
| UN Proper Shipping Name: | coper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (contains clodinafop-propargyl and cloquintocet-mexyl) | | |
| Transport hazard class: | ADR/RID: 9 | IMDG: 9 | IATA: 9 |
| Packaging group: | ADR/RID: III | IMDG: III | IATA: III |
| Environmental hazard: | 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:

| H302 | Harmful if swallowed |
|------|---|
| H304 | May be fatal if swallowed and enters airways |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness and dizziness |
| H351 | Suspected of causing cancer |
| 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 |
| | |

TWA: Time weighted average is the 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 own data. Self-classification of mixture Update to section 3