

**SAFETY DATA SHEET
Hi-AUBIN**
SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Product name Hi-AUBIN
Chemical name Alpha Cypermethrin 10 EC

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

Identified uses Insecticide

1.3. Details of the supplier of the safety data sheet

Supplier Hockley Agro
Hockley House
3 Longstone Road
Ashbrook Office Park
Manchester
M22 5LB
TEL: +44 (0) 161 209 7400
FAX: +44 (0) 161 209 7401
sds@hockley.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0)800 246 1274 (24 hours)

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226
Health hazards Acute Tox. 3 - H301 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335, H336 STOT RE 2 - H373 Asp. Tox. 1 - H304
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements
Hazard pictograms


Signal word

Danger

Hi-AUBIN

Hazard statements	H226 Flammable liquid and vapour. H301 Toxic if swallowed. H332 Harmful if inhaled. H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. H304 May be fatal if swallowed and enters airways.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment. P280 Wear protective gloves/ protective 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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Hydrocarbons, C9, aromatics, α -cypermethrin (ISO), ISO-BUTANOL, Benzenesulfonic acid, C10-13-(linear)alkyl derivs., calcium
Supplementary precautionary statements	P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe vapour/ spray. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P312 Call a POISON CENTRE/doctor if you feel unwell. P314 Get medical advice/ attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P330 Rinse mouth. P331 Do NOT induce vomiting. P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hydrocarbons, C9, aromatics	50-80 %
CAS number: 64742-95-6	
Classification	
Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
α-cypermethrin (ISO)	10.87 %
CAS number: 67375-30-8 EC number: 257-842-9	
M factor (Acute) = 1000 M factor (Chronic) = 1000	
Classification	
Acute Tox. 3 - H301 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) T; R25. Xn; R48/20/21/22. Xi; R37. N; R50/53
ISO-BUTANOL	1-5 %
CAS number: 78-83-1 EC number: 201-148-0	
Classification	
Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336	Classification (67/548/EEC or 1999/45/EC) R10 Xi;R37/38,R41 R67
Benzenesulfonic acid, C10-13-(linear)alkyl derivs., calcium	0-5%
CAS number: 1335202-81-7 EC number: 932-231-6 REACH registration number: 01-2119560592-37-XXXX	
Classification	
Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Never give anything by mouth to an unconscious person. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Get medical attention immediately.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water.
Eye contact	IF IN EYES: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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4.2. Most important symptoms and effects, both acute and delayed

General information None known.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use foam, carbon dioxide or dry powder to extinguish.

Unsuitable extinguishing media High volume water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Highly flammable gases or vapours. Oxides of the following substances: Carbon. Nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting If risk of water pollution occurs, notify appropriate authorities. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Keep unnecessary and unprotected personnel away from the spillage. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Clear up spills immediately and dispose of waste safely. Contain and absorb spillage with sand, earth or other non-combustible material. Flush contaminated area with plenty of water. Place waste in labelled, sealed containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Restricted to professional users. For personal protection, see Section 8. Avoid inhalation of vapours/spray and contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Keep only in the original container in a cool, well-ventilated place. Protect from sunlight. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2. Refer to the label and/or leaflet

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ISO-BUTANOL

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³

Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

WEL = Workplace Exposure Limit

α-cypermethrin (ISO) (CAS: 67375-30-8)

Ingredient comments No exposure limits known for ingredient(s).

ISO-BUTANOL (CAS: 78-83-1)

DNEL Industry - Inhalation; Long term local effects: 310 mg/m³

8.2. Exposure controls

Eye/face protection Wear tight-fitting, chemical splash goggles or face shield. (EN 166)

Hand protection Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374.

Respiratory protection Wear a respirator fitted with the following cartridge: Particulate filter, type P2. Particulate filter, type P3.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Beige. Clear.
Odour	Aromatic.
Odour threshold	Not determined.
pH	pH (diluted solution): 4 - 6 (1% solution, 20°C)
Melting point	Not available.
Initial boiling point and range	ca. 150-180°C
Flash point	44°C
Evaporation rate	Not available.
Vapour pressure	ca. 0.2 kPa @ 20°C
Vapour density	Not relevant.
Relative density	ca. 0.91 g/cm ³ @ 20°C
Solubility(ies)	Emulsifiable in water.
Partition coefficient	Not available.
Auto-ignition temperature	447°C

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Decomposition Temperature	No decomposition if stored and handled as prescribed/indicated
Viscosity	Not available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Not available.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No data available.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Avoid the following conditions: Heat, sparks, flames. Freezing.
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10.5. Incompatible materials

Materials to avoid	None known.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Oxides of carbon. Oxides of nitrogen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	This product is toxic.
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Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	57.0
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Species	Rat
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Notes (oral LD₅₀)	LD ₅₀ 93 mg/kg, Oral, Rat
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ATE oral (mg/kg)	57.0
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Acute toxicity - dermal

Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Dermal, Rat
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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	0.593
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Species	Rat
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Notes (inhalation LC₅₀)	LC ₅₀ 1.06 mg/l, Inhalation, Rat
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ATE inhalation (dusts/mists mg/l)	1.5
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Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.
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Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Carcinogenicity

Carcinogenicity Not classified.

Reproductive toxicity

Reproductive toxicity - fertility Not classified.

Reproductive toxicity - development Not classified.

Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Prolonged or repeated exposure may cause the following adverse effects: Central and/or peripheral nervous system damage.

Target organs Nervous system

Aspiration hazard

Aspiration hazard May be harmful if swallowed and enters airways.

SECTION 12: Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 0.39 mg/m³, *Oncorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.42 mg/m³, *Daphnia magna*

Acute toxicity - aquatic plants EC₅₀, 72 hours: >0.053 mg/l, *Pseudokirchneriella subcapitata*

12.2. Persistence and degradability

Persistence and degradability Not available.

Phototransformation Not relevant.

12.3. Bioaccumulative potential

Bioaccumulative potential No information available.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

Other adverse effects No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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General information Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	2903
UN No. (IMDG)	2903
UN No. (ICAO)	2903
UN No. (ADN)	2903

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (ALPHA CYPERMETHRIN)
Proper shipping name (IMDG)	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (ALPHA CYPERMETHRIN)
Proper shipping name (ICAO)	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (ALPHA CYPERMETHRIN)
Proper shipping name (ADN)	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (ALPHA CYPERMETHRIN)

14.3. Transport hazard class(es)

ADR/RID class	6.1
ADR/RID subsidiary risk	3
ADR/RID classification code	TF2
ADR/RID label	6.1
IMDG class	6.1
IMDG subsidiary risk	3
ICAO class/division	6.1
ICAO subsidiary risk	3
ADN class	6.1
ADN subsidiary risk	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

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EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•3W
Hazard Identification Number (ADR/RID)	63
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	<p>Transport</p> <p>Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348) Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367) Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)</p> <p>Supply and Use</p> <p>Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716) Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009 Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677) EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits Control of Pesticide Regulations 1986 Dangerous Substances and Explosive Atmospheres Regulations 2002</p> <p>Waste Treatment</p> <p>Environmental Protection Act 1990, Part II Environmental Protection (Duty of Care) Regulations 1991 The Waste Management Licensing Regulations 1994 (as amended) Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended) Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94) Water Resources Act 1991 Anti-Pollution Works Regulations 1999 MAPP 19018</p>
EU legislation	<p>Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.</p> <p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</p> <p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p>

15.2. Chemical safety assessment

SECTION 16: Other information

SDS number	20877
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Hazard statements in full

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
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.
H412 Harmful to aquatic life with long lasting effects.