

ACTARA

Version 13 - This version replaces all previous versions.

Revision Date 12.12.2013

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

1.1 Product identifier

Product name : ACTARA

Design code : A9584C

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

Use : Insecticide

1.3 Details of the supplier of the safety data sheet

Company : Syngenta UK Limited
CPC4, Capital Park
Fulbourn, Cambridge
CB21 5XE

Telephone : (01223) 883400

Telefax : (01223) 882195

Website : www.syngenta.co.uk

1.4 Emergency telephone number

: +44 (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Acute aquatic toxicity : Category 1 H400

Chronic aquatic toxicity : Category 1 H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal Word	:Warning	
Hazard Statements	:H410	Very toxic to aquatic life with long lasting effects.
Precautions Statements	:P273 :P391 :P501	Avoid release to the environment. Collect spillage. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

2.1 Other hazards

May form flammable dust-air mixture.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration
thiamethoxam	153719-23-4	Flam. Sol.1; H228 Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	25 % W/W
lignosulfonic acid, ethoxylated, sodium salts	68611-14-3	Eye Irrit.2; H319 STOT SE3; H335	1 - 10 % W/W
sodium dodecyl sulphate	151-21-3 68585-47-7 205-788-1 01-21119489463-28-0000	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 Aquatic Chronic3; H412	1 - 5 % W/W

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Substances for which there are Community workplace exposure limits.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

- General Advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.
- Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
- Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
- Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available.
Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Use alcohol-resistant foam or water spray.
Do not use a solid water stream as it may scatter and spread fire.
- 5.2 Special hazards arising from the substance or mixture**
As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
- 5.3 Advice for fire-fighters:**
Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**
Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

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- 6.2 Environmental precautions:**
Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**
Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly. If the product contaminates rivers and lakes or drains inform respective authorities.
- 6.4 Reference to other sections**
Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling**
This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.
- 7.2 Conditions for safe storage, including any incompatibilities**
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.
- 7.3 Specific end use(s)**
Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
thiamethoxam	3 mg/m ³	8 h TWA	SYNGENTA

8.2 Exposure controls

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

- Engineering Measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne dust is generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek

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	additional occupational hygiene advice.
Protective measures	: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.
Respiratory protection	: No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.
Hand protection	: Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.
Eye Protection	: Eye protection is not usually required. Follow any site specific eye protection policies.
Skin and body protection	: No special protective equipment required. Select skin and body protection based on the physical job requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	: Solid
Form	: Granules
Colour	: Beige to brown
Odour	: Musty
Odour Threshold	: No data available
pH	: 7-11 at 1% w/v (as a dispersion)
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: Not highly flammable
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: No data available
Solubility in other solvents	: Not soluble
Partition Coefficient: n-octanol/water	: No data available
Autoignition temperature	: > 120 °C
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidising

9.2 Other information

Minimum ignition temperature	400 °C
Dust explosion class	: Forms flammable dust clouds
Minimum ignition energy	: 0.03 – 0.1 J
Bulk density	: 0.42 – 0.52 g/cm ³
Miscibility	: Miscible
Surface tension	: 46.0 – 47.6 mN/m at 20 °C

SECTION 10. STABILITY AND REACTIVITY

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10.1 Reactivity	:	No information available
10.2 Chemical Stability	:	No information available
10.3 Possibility of hazardous reactions	:	Stable at normal ambient temperature and pressure. Hazardous polymerisation does not occur. At elevated temperatures it will undergo rapid, gas evolving thermal decomposition.
10.4 Conditions to avoid	:	No information available
10.5 Incompatible materials	:	No information available
10.6 Hazardous decomposition products	:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	:	LD50 rat, >5,000 mg/kg
Acute inhalational toxicity	:	LC50 rat, >5.29 mg/m ³ , 4h
Acute dermal toxicity	:	LD50 rat, > 5,000 mg/kg
Skin corrosion/irritation	:	Rabbit: non-irritating
Serious eye damage/eye irritation	:	Rabbit: non-irritating
Respiratory or skin sensitisation	:	Maximisation Test guinea pig: not a skin sensitiser in animal tests.
Germ cell mutagenicity	:	
Thiamethoxam	:	Did not show mutagenic effects in animal experiments.
sodium dodecyl sulphate	:	In vitro tests did not show mutagenic effects
Carcinogenicity	:	
Thiamethoxam	:	Liver tumours noted in mice that are not relevant to humans.
Reproductive toxicity	:	
Thiamethoxam	:	Did not show reproductive toxicity effects in animal experiments.
STOT – repeated exposure	:	
Thiamethoxam	:	Did not show neurotoxicity in animal experiments.
Further information	:	No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.
Thiamethoxam	:	

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	:	LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), > 100 mg/l, 96h
Toxicity to aquatic invertebrates	:	EC50 <i>Daphnia magna</i> (water flea), > 100 mg/l, 48h EC50 <i>Cloeon sp.</i> , 56 µg/l, 48h (derived from components)
Toxicity to aquatic plants	:	ErC50 <i>Pseudokirchneriella subcapitata</i> (green algae), >100 mg/l, 72h

12.2 Persistence and degradability

Biodegradability	:	
Thiamethoxam	:	Not readily biodegradable.
Stability in water	:	Degradation half life: 11 d
Thiamethoxam	:	Not persistent in water
Stability in soil	:	Degradation half life: 51 d
Thiamethoxam	:	Not persistent in soil

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12.3 Bioaccumulative potential

Thiamethoxam : The substance has low potential for bioaccumulation.

12.4 Mobility in soil

Thiamethoxam : The substance has medium mobility in soil.

12.5 Results of PBT and vPvB assessment

Thiamethoxam : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Other information : Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (THIAMETHOXAM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
	Labels	:	9
14.5	Environmental hazards	:	Environmentally hazardous

Sea transport (IMDG)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (THIAMETHOXAM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
	Labels	:	9
14.5	Environmental hazards	:	Marine pollutant

Air transport (IATA-DGR)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

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			SOLID, N.O.S. (THIAMETHOXAM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
	Labels	:	9
14.6	Special precautions for user	:	none

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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

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

GHS-Labeling

Hazard pictograms



Signal Word	:Warning	
Hazard Statements	:H410	Very toxic to aquatic life with long lasting effects.
Precautions Statements	:P273 :P391 :P501	Avoid release to the environment. Collect spillage. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Further information

Approval number, MAPP 13728.

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 28/11/2013, version 6 with local amendment.

Full text of H-Statements referred to under sections 2 and 3.

H228	Flammable solid
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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