

Safety Data Sheet

Revision date:12/06/2008

replaces all previous editions

DYNAMEC

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY OR UNDERTAKING

Identification of the substance or preparation

Tradename DYNAMEC
 Design Code A8612AB
 AGI Code 27885 / 27819

Company identification

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2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS number	Product Denomination	EC number	% w/w	Hazard symbols	Risk phrases (R)
71751-41-2	abamectin	-	1.8	N, T+	26/28, 50/53
108-93-0	cyclohexanol	203-630-6	50 - 70	Xn	20/22, 37/38
57-55-6	1,2-propanediol (also known as Propane-1,2-diol)	200-338-0	10 - 20	-	-

For the full text of the R phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION

Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. 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: Remove 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.

Symptoms: Lack of coordination, tremors, dilation of the pupil.

Medical advice: This material is believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic mectin exposure. Toxicity can be minimized by early administration of chemical absorbents (e.g. activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.

5. FIRE FIGHTING MEASURES

Suitable 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.

Extinguishing media which must not be used for safety reasons: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards during fire fighting: 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.

Special protective equipment for firefighters: In the event of fire, wear full protective clothing and self-contained breathing apparatus.

Further information: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to protective measures listed in sections 7 and 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Additional advice: If the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE

Advice on safe handling: No special technical protective measures required. No special handling advice required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

Requirements for storage areas and containers: No special storage conditions required. 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

HSE; EH40/2002 OEL

Cyclohexanol, LTE 8hr TWA, 50ppm, 208 mg/m³

Propane-1,2-diol (Total, vapour and particulates), LTE 8hr TWA, 150ppm, 474 mg/m³

Propane-1,2-diol (Particulates), LTE 8hr TWA, 10 mg/m³

SYNGENTA Internal Standard

Abamectin, LTEL, 8 hr TWA: 0.02 mg/m³

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 mists or vapours are 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 additional occupational hygiene advice.

PERSONAL PROTECTIVE EQUIPMENT

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form/Physical State:	Liquid
Colour:	Pale yellow to yellow
Flash-Point:	69 °C (Pensky-Martens c.c.)
Oxidising Properties:	Not oxidising
Explosive Properties Assessment:	Not explosive
Density:	0.9764 g/cm ³ (20 °C)
pH Value:	3.2 (1.0 %; water; 25 °C)
Miscibility:	Miscible (water)
Odour:	Aromatic

10. STABILITY AND REACTIVITY

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapours.

Hazardous reactions: None known. Hazardous polymerisation does not occur. Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity LD50:	891 mg/kg (rat)
Acute Dermal Toxicity LD50:	> 5050 mg/kg (rat)
Acute Inhalation Toxicity LC50:	> 5.04 mg/l
Acute Skin Irritation:	Non irritant (rabbit)
Acute Eye Irritation:	Non irritant (rabbit)
Skin Sensitisation:	Not sensitising (guinea pig)

Long term toxicity: Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation: Abamectin does not bioaccumulate.

Stability in water: Abamectin is not persistent in water.

Stability in soil: Abamectin is not persistent in soil.

Mobility: Abamectin has slight mobility in soil.

ECOTOXICITY EFFECTS

Toxicity to Fish, LC50:	0.247 mg/l (Oncorhynchus mykiss (Rainbow trout); 96 h)
Toxicity to Algae EbC50:	80 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h)
Toxicity to Aquatic Invertebrates EC50:	0.095 mg/l (Daphnia magna (water flea); 48 h)

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

Rail / Road / Sea / Air (RID / ADR / IMDG / IATA)	Class	UN number	Packaging Group
Proper Shipping Name	9	3082	III
Marine pollutant	yes	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ABAMECTIN)	

15. REGULATORY INFORMATION

Classification / Hazard symbols	N	Dangerous for the environment
Risk phrase (R)	Xn	Harmful
	22	Harmful if swallowed.
	50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases (S)	2	Keep out of the reach of children.
	13	Keep away from food, drink and animal feeding stuffs.
	20/21	When using do not eat, drink or smoke.
	35	This material and its container must be disposed of in a safe way.
	57	Use appropriate containment to avoid environmental contamination.
Special label		To avoid risks to man and the environment, comply with the instructions for use.

16. OTHER INFORMATION

Always read the label. Use pesticides safely.
Based on SDS version 3 issued 20/02/2008.
Product registration number: MAFF 13331 / PCS 02640

Text of R phrases mentioned in Section 2:

R20/22 Also harmful by inhalation and if swallowed.

R26/28 Very toxic by inhalation and if swallowed.

R37/38 Irritating to respiratory system and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.