

## DYNAMEC

Version 2

Revision Date 23.01.2006

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

#### PRODUCT INFORMATION

**Product name** : DYNAMEC  
**Design Code** : A8612AB  
**Use** : insecticide  
**Company** : Syngenta Crop Protection AG  
 Postfach  
 CH-4002 Basel  
 Switzerland  
**Telephone** : +41 61 323 11 11  
**Telefax** : +41 61 323 12 12  
**Emergency telephone number** : +44 1484 538444



Harmful



Dangerous for the environment

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous components

Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrase(s)	Concentration
abamectin	71751-41-2		N, T+	R26/28 R50/53	1.8 % W/W
cyclohexanol	108-93-0	203-630-6	Xn	R20/22 R37/38	50 - 50 % W/W
1,2-propanediol	57-55-6	200-338-0			10 - 20 % W/W

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 center 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.

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- 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** : constriction of pupils  
lack of coordination  
tremors
- 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  
alcohol-resistant foam  
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 fire-fighters** : In the event of fire, wear self-contained breathing apparatus.

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**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.

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**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.

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**7. HANDLING AND STORAGE****HANDLING**

**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.

**STORAGE**

**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 feedingstuffs.

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Components with workplace control parameters

Components	Exposure limit(s)	Value type	Source
abamectin	0.02 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
cyclohexanol	50 ppm 50 ppm 50 ppm 50 ppm	8 h TWA 8 h TWA 8 h TWA 15 min STEL 8 h TWA	ACGIH DFG SUVA SUVA UK HSE
propane-1,2-diol	10 mg/m <sup>3</sup> 150 ppm 470 mg/m <sup>3</sup>	Particulates Total (vapour & particulates)	8 h TWA UK HSE

#### 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 vapors 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

**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.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	: liquid
<b>Colour</b>	: pale yellow to brown
<b>Odour</b>	: aromatic
<b>pH</b>	: 3.2 at 1.0 % w/v (25 °C)
<b>Flash point</b>	: 69 °C Pensky-Martens c.c.
<b>Oxidizing properties</b>	: not oxidizing
<b>Explosive properties</b>	: Not explosive
<b>Density</b>	: 0.9764 g/cm <sup>3</sup> at 20 °C
<b>Water solubility</b>	: Miscible

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**10. STABILITY AND REACTIVITY**

<b>Hazardous decomposition products</b>	: Combustion or thermal decomposition will evolve toxic and irritant vapors.
<b>Hazardous reactions</b>	: None known. Hazardous polymerization does not occur. Stable under normal conditions.

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**11. TOXICOLOGICAL INFORMATION**

<b>Acute oral toxicity</b>	: LD50 Rat, 891 mg/kg
<b>Acute inhalation toxicity</b>	: LC50 , > 5.04 mg/l
<b>Acute dermal toxicity</b>	: LD50 Rat, > 5,050 mg/kg
<b>Skin irritation</b>	: Rabbit: non irritant
<b>Eye irritation</b>	: Rabbit: non irritant
<b>Sensitization</b>	: guinea pig not sensitizing

**Long term toxicity**

Did not show carcinogenic, teratogenic or mutagenic effects in

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animal experiments.

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**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 *Oncorhynchus mykiss* (rainbow trout), 0.247 mg/l , 96 h**Toxicity to aquatic invertebrates** : EC50 *Daphnia magna* (Water flea), 0.095 mg/l , 48 h**Toxicity to algae** : EBC50 *Pseudokirchneriella subcapitata* (green algae), 80 mg/l , 72 h

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**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.

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**14. TRANSPORT INFORMATION**

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**Land transport***ADR/ RID:*

UN-No: 3082  
Class: 9  
Danger Label Number : 9  
Packaging group III  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
( ABAMECTIN )

**Sea transport***IMDG:*

UN-No: 3082  
Class: 9  
Danger Label Number : 9  
Packaging group: III  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
( ABAMECTIN )

Marine pollutant : Marine pollutant

**Air transport***IATA-DGR*

UN-No: 3082  
Class: 9  
Danger Label Number : 9  
Packaging group: III  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
( ABAMECTIN )

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**15. REGULATORY INFORMATION****Labelling according to EC Directives**

Hazardous components which must be listed on the label:

- abamectin

**Symbol(s)** : Xn Harmful  
N Dangerous for the environment

**R-phrase(s)** : R22 Harmful if swallowed.  
R50/53 Very toxic to aquatic organisms, may cause

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long-term adverse effects in the aquatic environment.

<b>S-phrases(s)</b>	:	S 2 S13  S20/21 S35  S57	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination.
<b>Special labelling of certain preparations</b>	:	To avoid risks to man and the environment, comply with the instructions for use.	
<b>Note</b>	:	The preparation is classified as dangerous in accordance with Directive 1999/45/EC.	

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**16. OTHER INFORMATION****Further information**

Text of R phrases mentioned in Section 2:

<b>R20/22</b>	Also harmful by inhalation and if swallowed.
<b>R26/28</b>	Very toxic by inhalation and if swallowed.
<b>R37/38</b>	Irritating to respiratory system and skin.
<b>R50/53</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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