

CHES

Version 8

Revision Date 07.06.2006

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

PRODUCT INFORMATION

Product name : CHES
Design Code : A9364A
Use : Insecticide
Company : Syngenta Crop Protection AG
 Postfach
 CH-4002 Basel
 Switzerland
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Harmful

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrase(s)	Concentration
pymetrozine	123312-89-0		Xn	R40 R52/53	50 % W/W
naphthalenesulfonic acid, dibutyl-, sodium salt	25417-20-3	246-960-6	Xn	R20/22 R36/38	5 - 10 % W/W

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

3. Hazards identification

Limited evidence of a carcinogenic effect.
May form flammable dust-air mixture.

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.

CHESS

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

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

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** : Fire will spread by burning with flame.
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.
- 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.
Avoid dust formation.
- Environmental precautions** : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up** : Contain spillage, pick up with an electrically protected vacuum

CHESS

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

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.

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

7. HANDLING AND STORAGE**HANDLING**

Advice on 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. 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 : 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.

Other data : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

CHESSE

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	Exposure limit(s)	Value type	Source
pymetrozine	0.8 mg/m ³	8 h TWA	SYNGENTA

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 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** : A particulate filter respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection** : Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material
Nitrile rubber
- Eye protection** : Eye protection is not usually required. Follow any site specific eye protection policies.
- Skin and body protection** : Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate:
Dust impervious protective suit

CHESS

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: granules
Colour	: beige to brown
Odour	: weak
pH	: 7 - 11 at 1 % w/v
Flammability (solid, gas)	: not highly flammable
Dust explosion class	: Forms flammable dust clouds.
Minimum ignition energy	: < 1 J
Oxidizing properties	: not oxidizing
Explosive properties	: Not explosive
Bulk density	: 0.4 - 0.6 g/cm ³
Miscibility	: Miscible
Solubility in other solvents	: not soluble
Surface tension	: 63.9 - 64.0 mN/m at 20 °C

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 Rat, > 5,000 mg/kg
Acute inhalation toxicity	: LC50 Rat, > 3,090 mg/m ³ , 4 h
Acute dermal toxicity	: LD50 Rat, > 2,000 mg/kg
Skin irritation	: Rabbit: Non-Irritating
Eye irritation	: Rabbit: Non-Irritating
Sensitization	: Maximisation Test guinea pig: not sensitizing

CHESSE

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

: Buehler Testguinea pig: not sensitizing

Long term toxicity

Did not show mutagenic or teratogenic effects in animal experiments.

Increased levels of liver tumours were observed at high doses in rats and mice. The relevance of these findings to humans is questionable.

Did not show reproductive toxicity effects in animal experiments.

This information applies to pymetrozine.
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.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation : Pymetrozine has low potential for bioaccumulation

Stability in water : Pymetrozine is not persistent in water

Stability in soil : Pymetrozine is not persistent in soil.

Mobility : Pymetrozine has slight mobility in soil.

ECOTOXICITY EFFECTS

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout), > 100 mg/l , 96 h

Toxicity to aquatic invertebrates : EC50 *Daphnia magna* (Water flea), > 100 mg/l , 48 h

Toxicity to algae : ErC50 *Selenastrum capricornutum* (green algae), *Selenastrum capricornutum* (green algae), > 100 mg/l , 72 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.

CHESS

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

Empty containers should be taken for local recycling or waste disposal.
Do not re-use empty containers.

14. TRANSPORT INFORMATION**Land transport***ADR/ RID:*

Regulation: Not dangerous goods

Sea transport*IMDG:*

Regulation: Not dangerous goods

Air transport*IATA-DGR*

Regulation: Not dangerous goods

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

Hazardous components which must be listed on the label:

- pymetrozine

Symbol(s)	: Xn	Harmful
R-phrase(s)	: R40	Limited evidence of a carcinogenic effect.
S-phrase(s)	: S 2 S13 S20/21 S36/37	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Wear suitable protective clothing and gloves.

CHESS

Version 8

Revision Date 07.06.2006

Print Date 07.06.2006

Special labelling of certain preparations : To avoid risks to man and the environment, comply with the instructions for use.

Note : The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

16. OTHER INFORMATION**Further information**

Text of R phrases mentioned in Section 2:

R20/22	Harmful by inhalation and if swallowed.
R36/38	Irritating to eyes and skin.
R40	Limited evidence of a carcinogenic effect.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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