

SAFETY DATA SHEET

4/5/04

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

Dow AgroSciences Limited

Latchmore Court
Brand Street
Hitchin
Herts SG5 1NHEmergency Telephone Number: UK: 0870 600 2999
Eire: 01 821 4999Product Name: **EMPIRE* 20 INSECTICIDE : HSE 4844 (PCS 93025)**

LV70: 35347

Issue Date: Feb. 95

Ref: H8615

Revised: May 04 (Section(s) 2-5, 8, 9, 11-13, 15 & 16)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Dangerous components (see section 16 for complete R-phrases):

			CAS	EC No
Chlorpyrifos	20 %	T; R25, N; R50/53	002921-88-2	220-864-4
Proprietary petroleum solvent	10 %			
Inert ingredients	Balance			

3. HAZARDS IDENTIFICATION

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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4. FIRST-AID MEASURES

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

Ingestion

Do not induce vomiting. Call a physician. The decision of whether to induce vomiting or not should be made by a physician.

Eye Contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact

Wash skin thoroughly with soap and water.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

This material contains a cholinesterase inhibitor. Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PA M/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Water fog or fine spray. Carbon dioxide. Dry chemical powder. Foam.

Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

Combustion products include: Hydrogen chloride. Sulphur oxides. Nitrogen oxides.

Protection of Firefighters

Wear protective clothing and use self-contained breathing apparatus.

Additional Information

Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear appropriate safety clothing and eye/face protection (see Section 8).

Environmental Precautions

Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.

Methods of Cleaning Up

Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number.

7. HANDLING AND STORAGE

Handling

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work.

Storage

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chlorpyrifos: Dow AgroSciences IHG is 0.1 mg/m³ (skin).

Engineering Controls

Good general ventilation should be sufficient for most conditions.

Respiratory Protection

For most conditions, no respiratory protection should be needed. However, when airborne exposure guidelines and/or comfort levels may be exceeded use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

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Hand/Skin Protection

Wear clean, long-sleeved, body-covering clothing.

For emergency conditions: Use protective clothing impervious to this material. Use chemical resistant gloves classified under standard EN 374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Nitrile. Polyvinyl chloride ("PVC" or "vinyl"). Neoprene.

Avoid gloves made of: Polyvinyl alcohol ("PVA").

Eye/Face Protection

Eye protection should not be necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: suspension
Colour	: white
Odour	: low
Water solubility	: suspends
Flash point	: none; boils before flashing
Explosive properties	: not explosive
Flammability	: not flammable
Density	: 1.03 (EEC: A3 METHOD)
Surface tension	: 35.5 mN/m (25 deg.C) (neat)
Autoflammability	: >400 deg.C

10. STABILITY AND REACTIVITY**Chemical Stability**

Is stable under normal storage conditions.

Conditions to Avoid

Avoid extremes of temperature.

Materials to Avoid

Strong basic, acidic or oxidising materials.

Hazardous Decomposition Products

None under normal conditions of storage and use.

11. TOXICOLOGICAL INFORMATION**Ingestion**

Low toxicity if swallowed. The oral LD50 for rats is >5000 mg/kg.

Skin Contact

The dermal LD50 for rabbits is >5000 mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged contact is essentially nonirritating to skin.

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Sensitisation

Non-sensitising to guinea pig skin.

Eye Contact

Essentially non-irritating to eyes.

Inhalation

No adverse effects anticipated by this route of exposure incidental to proper handling.

Other Information

Excessive exposure may cause organophosphate type cholinesterase inhibition. Not carcinogenic. Not mutagenic. Not toxic for reproduction.

12. ECOLOGICAL INFORMATION**Persistence and Degradability**

Assessment largely or completely based on data for active ingredient. Does not leach in soils and is therefore unlikely to contaminate ground water. Half-life in soils is dependent on soil type and conditions and is approximately 2-34 days.

Aquatic Toxicity

Material is toxic to fish on an acute basis (1mg/L<LC50<10mg/L).

Avian Toxicity

Material is practically non-toxic to birds on an acute basis (LD50 >2000mg/kg).

13. DISPOSAL CONSIDERATIONS

Toxic to aquatic organisms. Do not contaminate ponds, waterways or ditches with chemical or used container. Wash out thoroughly. Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators. Do not re-use container for any purpose.

14. TRANSPORT INFORMATION**Road & Rail**

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (CONTAINS CHLORPYRIFOS 20% W/W)

Truck/Rail ADR/RID : 9 Label :< >

Classification Code : M6

Packing Group : III

Kemler Code : 90 UN Number : 3082

Tremcard Nr. CEFIC : 90GM6-III

