

SAFETY DATA SHEET

7/2/01

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

Dow AgroSciences Limited
 Latchmore Court
 Brand Street
 Hitchin
 Herts SG5 1NH

Emergency Telephone Number: UK: 0870 600 2999
 Eire: 01 821 4999

Poisons Information Centre: UK: 0121 507 5588/5589
 Eire: 01 837 9964/66

Product Name: **DURSBAN* 4 INSECTICIDE: MAFF 07815**

LV70: 49760

Issue Date: Sept. 95

Ref: H8418

Revised: Nov. 00 (Section(s) 1, 3, 13 & 15)

2. COMPOSITION/INFORMATION ON INGREDIENTS**Components contributing to hazard:**

			CAS	EINECS
Chlorpyrifos	480 g/L	T, N; R25-50/53	002921-88-2	220-864-4
Solvent plus inert ingredients	Balance			
Composition Code	EF1042			

3. HAZARDS IDENTIFICATION

Flammable.

Harmful: may cause lung damage if swallowed.

Harmful in contact with skin and if swallowed.

Irritating to skin.

Extremely dangerous to fish or other aquatic life.

Dangerous to bees.

* DURSBAN Trademark of Dow AgroSciences

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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 and/or transport to emergency facility immediately. The decision of whether to induce vomiting or not should be made by an attending physician.

Eye Contact

Irrigate immediately with water for at least 5 minutes. Consult medical personnel.

Skin Contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

This material contains both a cholinesterase inhibitor and a solvent. 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. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. 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. Foam.

Hazardous Combustion Products

Hydrogen chloride. Sulphur oxides. Nitrogen oxides. Dependent on the intensity of the fire.

Protection of Firefighters

Wear protective clothing and use self-contained breathing apparatus.

Additional Information

Rapid decomposition occurs above 160 deg.C. Closed containers may explode due to pressure build-up when subjected to excessive heat or intense fire. 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.

Additional Information

Eliminate all ignition sources.

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. Avoid eye and skin contact.

Storage

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. 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 0.2 mg/m³ (skin).
Supplier recommendation for solvent is 100 ppm

Engineering Controls

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Respiratory Protection

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

Use protective clothing impervious to this material. Selection of specific items will depend on operation.

Eye/Face Protection

Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: clear liquid
Colour	: amber
Rel. density (water=1)	: 1.08 g/cm ³ (approx.)
Water solubility	: emulsifiable
Freezing point/range	: <-5 deg.C
Flash point	: 50-52 deg.C (PMCC)

10. STABILITY AND REACTIVITY**Chemical Stability**

Is stable under normal storage conditions.

Conditions to Avoid

Avoid extremes of temperature. Rapid decomposition occurs above 160 deg.C. Product undergoes exothermic decomposition which can lead to high temperatures and violent decomposition if heat developed is not removed.

Materials to Avoid

Strong basic, acidic or oxidising materials.

Hazardous Decomposition Products

None under normal conditions of storage and use.

11. TOXICOLOGICAL INFORMATION**Ingestion**

Single dose oral toxicity is considered to be moderate.
The oral LD50 for rats is 316 mg/kg.

Skin Contact

The dermal LD50 for rats is >2000mg/kg.
A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
Short single exposure may cause skin irritation.

Sensitisation

Non-sensitising to guinea pig skin.

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Eye Contact

May cause moderate eye irritation.

Inhalation

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

Other Information

Excessive exposure may cause organophosphate type cholinesterase inhibition.

12. ECOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Persistence and Degradability

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 60 days.

Aquatic Toxicity

Material is very highly toxic to fish on an acute basis (LC50 <0.1mg/L).

Material is very highly toxic to aquatic invertebrates on an acute basis (LC50 <0.1mg/L).

Avian Toxicity

Material is moderately toxic to birds on an acute basis (50mg/kg <LD50 <500mg/kg).

Other Information

Toxic to bees.

13. DISPOSAL CONSIDERATIONS

Extremely dangerous to fish or other aquatic life. 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.

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14. TRANSPORT INFORMATION**Road, Rail & Barge**

Proper shipping name: 3017, ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (Contains CHLORPYRIFOS 44.6% W/W AND PETROL EUM DISTILLATE)

Truck - ADR Loaded : 6.1-72c Empty : 6.1-91 Label : 6.1 + 3

Rail - RID Loaded : 6.1-72c Empty : 6.1-91 Label : 6.1 + 3

Filling % Packed :

Filling % Bulk :

Filling Kg/L (Gas) :

Kemler Code : 63 UN Number : 3017

Tremcard Nr. CEFIC : 61G43C

Tremcard Nr. Other :

Barge - ADNR Loaded : 6.1-72c Empty : 6.1-91 Label: 6.1+3

Ship Type : CATG. :

Sea

Proper shipping name: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (CONTAINS CHLORYRIFOS 44.6% W/W AND PETROLEUM DISTILLATE)

Sea - IMO/IMDG Class: 6.1 UN Nr : 3017 Label: 6 + 3

Packing Group : III EMS : 6.1-01 MFAG : 505

Container Type : Marine Pollutant : Y (Y/N)

Test Pressure (bar) : Filling % Packed :

Filling % Bulk :

Filling Kg/L (Gas) :

Air

Proper shipping name: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (CONTAINS CHLORYRIFOS AND PETROLEUM DISTILLATE)

Air-ICAO/IATA Class : 6.1 UN Nr : 3017 Label: 6.1 + 3

Sub Class : 3

Packing Group : III Pack Instr. Passenger : 611

Pack Instr. Cargo : 618

Remarks : Sample shipment not allowed by mail.

15. REGULATORY INFORMATION

Hazard Symbol : Xn - Harmful

Risk Phrases : Flammable. (R10)
Harmful: may cause lung damage if swallowed. (R65)
Harmful in contact with skin and if swallowed.
(R21/22)
Irritating to skin. (R38)

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Safety Phrases : Keep out of reach of children. (S2)
Keep away from food, drink and animal feeding stuffs.
(S13)
When using do not eat, drink or smoke. (S20/21)
Do not breathe spray. (S23)
Wear suitable protective clothing and gloves. (S36/37)
If you feel unwell, seek medical advice (Show the
label where possible). (S44)
If swallowed, do not induce vomiting: seek medical
advice immediately and show this container or label.
(S62)

16. OTHER INFORMATION

The information herein is given in good faith and to the best of our knowledge but no warranty, express or implied, is made.