



**United Nations
Environment Programme**

**Food and Agriculture Organization
of the United Nations**

Distr.: General
23 January 2006

English only

**Rotterdam Convention on the Prior Informed
Consent Procedure for Certain Hazardous
Chemicals and Pesticides in International Trade
Chemical Review Committee**

Second meeting

Geneva, 13–17 February 2006

Item 5 (b) of the provisional agenda*

Listing of chemicals in Annex III of the Rotterdam Convention:

review of notifications of final regulatory actions to ban or severely restrict a chemical

**Information on trade in chemicals under consideration by the
Chemical Review Committee at its second meeting**

1. The annex to the present note contains the information received and collected by the secretariat on trade in chemicals under consideration by the Chemical Review Committee at its second meeting.
2. The following material is included in the annex:
 - (a) Table with summary of information received and collected by the secretariat as at 18 January 2006;
 - (b) Information submitted by Canada;
 - (c) Information submitted by Pesticide Action Network UK (PAN UK);
 - (d) Information submitted by CropLife International;
 - (e) Information collected from the Foundation for Advancements in Science and Education (FASE);
 - (f) Information on superseded entries excerpted from the thirteenth edition of The Pesticide Manual.

* UNEP/FAO/RC/CRC.2/1.

Annex

A. Table with summary of information received and collected by the secretariat as at 18 January 2006

Chemical name	Source of information
Alachlor	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) Registration ended in 1985.</p> <p>PAN (6-12-05) Stated in the letter: We have received reports of alachlor use. It is advertised for sale by many different companies on their websites, with ready access to MSDS and specimen labels. The Monsanto MSDS is dated April 2002. http://www.cdms.net/manuf/mprod.asp?mp=25 http://www.plaaskem.co.za/pages/herbicides/centre.htm http://www.montereychemical.com/msds/Shroud-m.pdf http://www.yelori.com/products/Alachlor.shtml http://lscgw1.monsanto.com/esh/msdslib.nsf/E225CB60DE886579062568820065D8AC/\$file/Micro-Tech.402.pdf</p> <p>FASE (18/01/06) Data on Export of alachlor from US Ports</p>
Methyl-parathion	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) Registration ended in 1950's</p> <p>PAN (6-12-05). Stated in the letter: We receive regular information about use of methyl parathion, which is still traded widely throughout the world. During a recent visit to Peru we saw packages of products containing this active ingredient. The Bayer CropScience Materials Safety Data Sheet for methyl parathion is dated November 2003 http://www.bayercropscience.com.au/products/resources/msds/Folidol%20450%20CS_16_MSDS_1103.pdf</p>
Endosulfan	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) Endosulfan are currently registered for pest control use in Canada. The registration for endosulfan is currently under reevaluation. There is no primary production of these pesticides in Canada. Active ingredients are imported from foreign manufacturers for reformulation into end-use products. Reformulated and/or end-use products may be exported for sale in other countries</p> <p>PAN (6-12-05). Stated in the letter: We receive regular information about use of endosulfan, which is still traded widely throughout the world. We have seen it in use this year by small scale farmers on cotton in Benin. It is still recommended for use, and supplied to farmers by, the cotton companies in the region. It is widely used in Asia and Latin America. Bayer CropScience have information about endosulfan-based for sale products on their websites, for example at Bayer CropScience Australia: The MSDS is dated October 2002. http://www.bayercropscience.com.au/products/product.asp?id=116</p> <p>FASE (18/01/06) Data on Export of endosulfan from US Ports</p>

TBT	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) Use of tributyltin compounds in antifouling paints has been phased out in Canada in accordance with the International Convention on the Control of Harmful Anti-fouling Systems on Ships under the International Maritime Organization. Tributyltin compounds are registered for use as a material or wood preservative in Canada. The formulation of pest control products tributyltin compounds includes import of active ingredients for foreign manufacturers. Reformulated and/or end-use products may be exported for sale in other countries.</p> <p>PAN (6-12-05) Stated in the letter: There is evidence of sales of TBT compounds (various CAS numbers, 56-35-9, 688-73-3, 98-51-1 ...). TBT CAS 56-35-9 is advertised for sale by various companies on: http://www.chemexper.com/index.shtml?main=http://www.chemexper.com/search/cas/56-35-9.html Regulators continue to make decisions on the basis of continued use. For example, in January 2004 the US EPA released a final ambient water quality criteria document for tributyltin (TBT), making recommendations on the basis of its continued. Tributyltin oxide (TBTO) (no CAS number given, but other data uses CAS 56-35-9 for tributyltin oxide) is advertised (on website http://www.buyersguidechem.de/AfirmAus.php?fnumm=42875432&pname=Tributyltin%20oxide%20(TBTO)#homex &cass=) for sale by the following suppliers: Sigma-Aldrich Chemi GmbH, Germany Shanghai Mintchem Development Co Ltd, China (leading producer) Shanghai Yongyi Chemicals Co Ltd, China Sattya Chemical Divison, Pechiney World Trade (USA) Inc, USA</p>
Cyhexatin	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) The registration stopped in 1989.</p> <p>PAN (6-12-05) Stated in the letter: Sipcam-Oxon Group, Italy: its company Oxon is a manufacturer of fine chemicals and pesticides and sells the acaricide cyhexatin. Its website says that "Many formulated plant protection products are produced from active ingredients obtained from numerous producers the world over", and it provides a list of the primary producers. See www.sipcam-oxon.com/page/product.html Cyhexatin is advertised for sale by a number of Chinese companies including: Sinochem Hebei Corporation Nanjing Agrovanche Chemical Industry Ltd Chanduli Chemical Co Ltd China National Chemical Construction Ningbo Imp & Exp Company Richchem Inc</p>
DBCP	<p>CropLife (30-11-05) No confirmation for manufacture and trade</p> <p>CANADA (1-12-05) The registration stopped in 1978</p> <p>PAN (6-12-05) Stated in the letter: We had understood that this produce was no longer used in agriculture, and that the problem it now presented was persistence in the environment and water supplies. However the nematocide DBCP is advertised for sale by Amvac Chemical Corporation, 4100 East Washington Blvd, Los Angeles, CA 90023, USA. The US Department of Labour, Occupational Safety & Health Administration recently called for public comment on its request for an extension of the information collection requirements contained in the DBCP Standard. It asked for comments by 31 October 2005, and may therefore have updated information. See: http://www.washingtonwatchdog.org/environmental_justice/documents/fr/05/se/01/fr01se05-109.html</p> <p>Pesticide manual 13th Edition: superseded entry</p>

Mirex	<p>CropLife (30-11-05) No confirmation for manufacture and trade</p> <p>CANADA (1-12-05) Never been registered for pest control use in Canada There were three manufacturers that received large quantities of mirex in the 1960s (a peak of 46,000 kg in 1965). In addition there were other companies that imported small quantities into Canada. These smaller quantities were probably for research purposes and were not used in commercial production.</p> <p>The Department of National Defence (DND) undertook a study of the use of mirex as a pyrotechnic for the generation of smoke for military exercises and imported about 225 kg for this purpose. The Task Force compiled imports from the DND until 1976.</p> <p>Pesticide manual 13th Edition: superseded entry</p>
Dicofol	<p>CropLife (30-11-05) Confirm manufacture and trade</p> <p>CANADA (1-12-05) Dicofol is currently registered for pest control use in Canada. Reevaluation of dicofol will be addressed before 2009. There is no primary production of these pesticides in Canada. Active ingredients are imported from foreign manufacturers for reformulation into end-use products. Reformulated and/or end-use products may be exported for sale in other countries</p> <p>FASE (18-01-06) Data on Export of dicofol from US Ports</p>
4 nitrophenyl	No information available

B. Information submitted by Canada

-----Original Message-----

From: Lars Juergensen [mailto:Lars_Juergensen@hc-sc.gc.ca]

Sent: 01 December 2005 14:41

To: PIC; pic@unep.ch

Cc: Leif.Stephanson@ec.gc.ca; Trish MacQuarrie

Subject: Information on Trade from Canada

Dear Mr. Van der Graaf

The following information is provided in response to your request for information regarding the continued import, manufacture, use and export of substances to be reviewed at the second meeting of the Chemical Review Committee of the Rotterdam Convention.

Pesticides

In Canada, pesticides are prohibited from use, sale or import unless registered under Canada's Pest Control Products Act. Of the pesticides to be considered by the Chemical Review Committee, alachlor, cyhexatin, dibromochloropropane and methyl-parathion are no longer registered for pest control product use in Canada. The registration for alachlor ended in 1985; the registration for cyhexatin ended in 1989; the registration for dibromochloropropane ended in 1978; and, the registration for methyl-parathion ended in the 1950's.

Mirex has never been registered for pest control use in Canada, and Canada has notified the secretariat of regulatory actions taken against industrial applications.

Endosulfan and dicofol are currently registered for pest control use in Canada. The registration for endosulfan is currently under reevaluation, and reevaluation of dicofol will be addressed before 2009. There is no primary production of these pesticides in Canada. Active ingredients are imported from foreign manufacturers for reformulation into end-use products. Reformulated and/or end-use products may be exported for sale in other countries.

Use of tributyltin compounds in antifouling paints has been phased out in Canada in accordance with the International Convention on the Control of Harmful Anti-fouling Systems on Ships under the International Maritime Organization. Tributyltin compounds are registered for use as a material or wood preservative in Canada. The formulation of pest control products tributyltin compounds includes import of active ingredients for foreign manufacturers. Reformulated and/or end-use products may be exported for sale in other countries.

Industrial substances

There were three manufacturers that received large quantities of mirex in the 1960s (a peak of 46,000 kg in 1965). In addition there were other companies that imported small quantities into Canada. These smaller quantities were probably for research purposes and were not used in commercial production.

The Department of National Defence (DND) undertook a study of the use of mirex as a pyrotechnic for the generation of smoke for military exercises and imported about 225 kg for this purpose. The Task Force compiled imports from the DND until 1976.

Industry Canada's Trade Data Online database indicates that there is export and import of substances listed under the Harmonized System code for 4-aminobiphenyl (292149 - aromatic monoamines (not elsewhere specified) and their derivatives (including salts thereof)). This trade, however, may be due to other substances captured under the same HS code.

Trade Date Online is available at

http://strategis.ic.gc.ca/sc_mrkti/tdst/engdoc/tr_homep.html.

If any further information is required, please do not hesitate to contact me.

Sincerely,

Lars Juergensen

Alternative Strategies and Regulatory Affairs Division

Pest Management Regulatory Agency

Health Canada

Sir Charles Tupper Building

2720 Riverside Dr. (A.L. 6607D)

Ottawa, ON K1A 0K9

tel: (613) 736-3697

fax: (613) 736-3659

Lars_Juergensen@hc-sc.gc.ca

<http://www.hc-sc.gc.ca/pmra-arla>

cc: Canadian DNA - pesticides
Canadian DNA - industrial substances

C. Information submitted by Pesticide Action Network UK (PAN UK)

Development House
56-64 Leonard Street
London EC2A 4JX
Tel: 020 7065 0905
Fax: 020 7065 0907
Email: admin@pan-uk.org
Web: www.pan-uk.org



Dr NA Van der Graaff
Executive Secretary
Secretariat for the Rotterdam Convention
FAO
Plant Protection Service
Viale delle Terme di Caracalla
00100 Rome, Italy

8 December 2005

Dear Niek,

Thank you for your letter of 6 October requesting evidence of trade in methyl parathion, endosulfan, alachlor, TBT, DBCP and cyhexatin. I apologise for not responding by 1 December, and hope that the following information is useful.

Methyl parathion

We receive regular information about use of methyl parathion, which is still traded widely throughout the world. During a recent visit to Peru we saw packages of products containing this active ingredient. The Bayer CropScience Materials Safety Data Sheet for methyl parathion is dated November 2003 http://www.bayercropscience.com.au/products/resources/msds/Folidol%20450%20CS_16_MSDS_11_03.pdf

Endosulfan

We receive regular information about use of endosulfan, which is still traded widely throughout the world. We have seen it in use this year by small scale farmers on cotton in Benin. It is still recommended for use, and supplied to farmers by, the cotton companies in the region. It is widely used in Asia and Latin America. Bayer CropScience have information about endosulfan-based for sale products on their websites, for example at Bayer CropScience Australia: The MSDS is dated October 2002.

<http://www.bayercropscience.com.au/products/product.asp?id=116>

Alachlor

We have received reports of alachlor use. It is advertised for sale by many different companies on their websites, with ready access to MSDS and specimen labels. The Monsanto MSDS is dated April 2002.

<http://www.cdms.net/manuf/mprod.asp?mp=25>

<http://www.plaaskem.co.za/pages/herbicides/centre.htm>

<http://www.montereychemical.com/msds/Shroud-m.pdf>

<http://www.velori.com/products/Alachlor.shtml>

[http://iscgw1.monsanto.com/esh/msdslib.nsf/E225CB60DE886579062568820065D8AC/\\$file/Micro-Tech.402.pdf](http://iscgw1.monsanto.com/esh/msdslib.nsf/E225CB60DE886579062568820065D8AC/$file/Micro-Tech.402.pdf)

TBT

There is evidence of sales of TBT compounds (various CAS numbers, 56-35-9, 688-73-3, 98-51-1 ...). TBT CAS 56-35-9 is advertised for sale by various companies on:

<http://www.chemexper.com/index.shtml?main=http://www.chemexper.com/search/cas/56-35-9.html>

Pesticide Action Network UK
Company Reg No: 2036915
Charity No: 327215

Regulators continue to make decisions on the basis of continued use. For example, in January 2004 the US EPA released a final ambient water quality criteria document for tributyltin (TBT), making recommendations on the basis of its continued.

Tributyltin oxide (TBTO) (no CAS number given, but other data uses CAS 56-35-9 for tributyltin oxide) is advertised (on website

[http://www.buyersguidechem.de/AfirmAus.php?fnumm=42675432&pname=Tributyltin%20oxide%20\(TBTO\)#homex &pass=](http://www.buyersguidechem.de/AfirmAus.php?fnumm=42675432&pname=Tributyltin%20oxide%20(TBTO)#homex&pass=)) for sale by the following suppliers:

Sigma-Aldrich Chemi GmbH, Germany

Shanghai Mintchem Development Co Ltd, China (leading producer)

Shanghai Yongyi Chemicals Co Ltd, China

Sattya Chemical Divison, Pechiney World Trade (USA) Inc, USA

Cyhexatin

Sipcam-Oxon Group, Italy: its company Oxon is a manufacturer of fine chemicals and pesticides and sells the acaricide cyhexatin. Its website says that "Many formulated plant protection products are produced from active ingredients obtained from numerous producers the world over", and it provides a list of the primary producers. See www.sipcam-oxon.com/page/product.html

Cyhexatin is advertised for sale by a number of Chinese companies including:

Sinochem Hebei Corporation

Nanjing Agrovanca Chemical Industry Ltd

Chanduli Chemical Co Ltd

China National Chemical Construction Ningbo Imp & Exp Company

Richchem Inc

DBCP

We had understood that this produce was no longer used in agriculture, and that the problem it now presented was persistence in the environment and water supplies. However the nematocide DBCP is advertised for sale by Amvac Chemical Corporation, 4100 East Washington Blvd, Los Angeles, CA 90023, USA.

The US Department of Labour, Occupational Safety & Health Administration recently called for public comment on its request for an extension of the information collection requirements contained in the DBCP Standard. It asked for comments by 31 October 2005, and may therefore have updated information. See:

http://www.washingtonwatchdog.org/environmental_justice/documents/fr/05/se/01/fr01se05-109.html

Yours sincerely,



Barbara Dinham
Director

MATERIAL SAFETY DATA SHEET

Bayer CropScience

Date of Issue: November 27, 2003

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name Folidol® 450 CS Insecticide
Other names None
Product codes and pack sizes 4953192 (4 x 5 L)
Chemical group Organophosphorus
Recommended use Agricultural insecticide
Formulation Capsule suspension (aqueous suspension containing microencapsulated parathion-methyl)
Supplier Bayer CropScience Pty Ltd ABN 87 000 226 022
Address 391 - 393 Tooronga Road, East Hawthorn
 Victoria 3123, Australia
Telephone (03) 9248 6888
Facsimile (03) 9248 6800
Website www.bayercropscience.com.au
Contact Development Manager (03) 9248 6888
Emergency Telephone Number 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

HAZARDOUS SUBSTANCE (see Risk phrases below) – **NON DANGEROUS GOOD** (road/rail)
 Poisonous. Cholinesterase inhibitor.

The encapsulation of the active ingredient, parathion-methyl, reduces the toxicity of this product. Parathion-methyl is a very toxic substance. Very toxic to aquatic invertebrates and birds.

Hazard classification Hazardous (National Occupational Health and Safety Commission - NOHSC)
Risk phrases R22 – Harmful if swallowed.
 R23 – Toxic by inhalation.
Safety phrases See Sections 4, 5, 6, 7, 8, 9, 13
ADG classification Not classified as a "Dangerous good" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea this product is a Marine Pollutant, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains parathion-methyl), Class 9, Packing Group III, UN 3082.
SUSDP classification Schedule 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/L)
Parathion-methyl	[298-00-0]	450
Other ingredients, including water	(non hazardous)	680

MATERIAL SAFETY DATA SHEET



Bayer CropScience

Date of Issue: November 27, 2003

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation	If inhaled, remove to fresh air and keep at rest. Obtain urgent medical advice. If breathing stops or shows signs of failing, start artificial respiration. If advised by doctor or Poisons Information Centre, atropine tablets may be administered - giving one atropine tablet 0.6 mg every 5 minutes until dryness of the mouth occurs. DO NOT attempt to give anything by mouth to a semi-conscious or unconscious person.
Skin contact	Immediately remove contaminated clothing. Wash affected areas with soap and water. Seek urgent medical aid. Persons assisting the patient should protect themselves from contamination. If advised by doctor or Poisons Information Centre, atropine tablets may be administered - giving one atropine tablet 0.6 mg every 5 minutes until dryness of the mouth occurs. DO NOT attempt to give anything by mouth to a semi-conscious or unconscious person.
Eye contact	Rinse eyes immediately with clean water for at least 15 minutes and obtain urgent medical aid.
Ingestion	Wash out mouth with water. Keep patient at rest and seek urgent medical advice as above. Transport patient to doctor or hospital quickly. If advised by doctor or Poisons Information Centre, atropine tablets may be administered - giving one atropine tablet 0.6 mg every 5 minutes until dryness of the mouth occurs. DO NOT attempt to give anything by mouth to a semi-conscious or unconscious person.
First Aid Facilities	Provide eyewash and safety shower facilities in the workplace. Obtain an emergency supply of atropine tablets 0.6 mg.
Medical attention	Folidol 450 CS contains parathion-methyl which is an organophosphorus compound, and as such it is a cholinesterase inhibitor. <u>Symptoms of poisoning</u> Mild intoxication causes headache, blurred vision, weakness, sweating, mild chest pain, nausea and vomiting. Severe intoxication causes cyanosis (blueness of the skin, as from lack of oxygen), muscular twitching, spasms, miosis (pinpoint pupils) and respiratory paralysis. These symptoms commence from one to three hours after excessive exposure. Repeated minor exposure may have a cumulative poisoning effect. <u>Treatment</u> Basic aid, decontamination, symptomatic treatment and if necessary administration of antidote. Antidote: Atropine sulphate, possibly in conjunction with toxogonin or obidoxime (PAM). Monitor respiratory, cardiac and central nervous system function. Monitor red blood cell and plasma cholinesterase levels. Administer oxygen if necessary. Watch for pulmonary oedema and delayed neurological symptoms. Continued absorption of parathion-methyl may occur and relapse may occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS. <u>Contraindications</u> Adrenergic derivatives. DO NOT give morphine or tranquilisers.

MATERIAL SAFETY DATA SHEET

Bayer CropScience

Date of Issue: November 27, 2003

5. FIRE FIGHTING MEASURES

Extinguishing media	Dry chemical or carbon dioxide for small fires. Water spray or foam for large fires.
Hazards from combustion products	In a fire, dimethyl sulfide, sulphur dioxide, carbon monoxide, carbon dioxide, phosphorus pentoxide, and nitrogen oxides may be formed.
Precautions for fire fighters	Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away and move all other personnel to windward side of fire. Isolate hazard area and deny entry. Consider evacuation, taking all relevant factors into account. In case of doubt, evacuate immediate vicinity and request emergency services assistance. Use water spray to cool fire-exposed containers. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later.
Hazchem code	Not applicable

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with the spilled material or contaminated surfaces. Do not smoke, eat or drink during the cleanup process. Personnel involved in cleanup should wear full body protective clothing and equipment as described in Section 8 - PERSONAL PROTECTION, with self-contained breathing apparatus. Keep people and animals away and upwind. Consider evacuation and obtain assistance from emergency services if needed. Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place cloth in drum. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in the drum too. Cover and label drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority. Decontaminate tools and equipment used in the cleanup. Parathion-methyl can be hydrolysed in water by heating and adjusting the pH to alkaline (e.g. with lye).

7. HANDLING AND STORAGE

Handling	Keep out of reach of children. Product and spray are poisonous if absorbed by skin contact, inhaled or swallowed. May irritate the eyes and skin. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with eyes, skin and clothing. Do not inhale spray mist. If clothing becomes contaminated with product, or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, respirator and contaminated clothing with detergent and warm water.
Storage	Store in the closed, original container in a cool, well-ventilated area. Store below 30°C. Do not store for prolonged periods in direct sunlight. Do not store near any material intended for use or consumption by humans or animals.
Flammability	Combustible liquid, Class C1 - flashpoint between 61° C and 150° C.

MATERIAL SAFETY DATA SHEET



Date of issue: November 27, 2003

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards	TWA for methyl parathion is 0.2 mg/m ³ . Skin notation <i>Exposure standard – time weighted average (TWA)</i> – the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week. <i>Skin notation</i> – Absorption through the skin may be a significant source of exposure.
Biological limit values	Production workers and agricultural workers handling this product should be monitored for cholinesterase levels. A baseline level should be established prior to any potential exposure. See Guidelines for Health Surveillance [NOHSC:7039(1995)]
Engineering controls	Control process conditions to avoid contact. Use in a well-ventilated area only.
Personal Protective Equipment	Product is poisonous if absorbed by skin contact, inhaled or swallowed. <ul style="list-style-type: none"> • Wear elbow-length PVC gloves • Wear protective waterproof clothing, cotton overalls buttoned to the neck and wrist, a washable hat and impervious footwear. • Wear full facepiece respirator - AS/NZS 1715/1716 approved, with combined dust and gas cartridge. In enclosed spaces a respirator with an independent air supply should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Beige viscous liquid
Odour:	Pungent garlic-like
pH:	6.1 (10% in water)
Vapour pressure:	Not available
Vapour density:	Not available
Boiling point:	Above 100° C
Freezing/melting point:	Not available
Solubility:	Disperses in water
Specific Gravity:	1.13 at 20° C
Flash Point:	Above 100° C (Pensky-Martens closed cup)
Flammability (explosive) limits:	Not available
Auto-ignition temperature:	Not available
Partition coefficient (octanol/water):	<i>Parathion-methyl</i> : Log P_{ow} = 3.0
Viscosity:	6.9 x 10 ⁸ cP at shear stress 0.15 Pa at 25° C

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions of use.
Conditions to avoid	Temperatures above 100° C. The product should not be allowed to dry up.
Incompatible materials	Solvents, strong alkalis, amines and strong oxidising agents

MATERIAL SAFETY DATA SHEET



Date of Issue: November 27, 2003

10. STABILITY AND REACTIVITY - continued

Hazardous decomposition products	When the product is dried up, the active ingredient parathion-methyl will decompose rapidly when heated to temperatures above 100° C, significantly increasing the risk of inducing explosion. The decomposition is dependent on time as well as temperature due to exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile malodorous and flammable compounds such as dimethyl sulfide. In a fire, dimethyl sulphide, sulphur dioxide, carbon monoxide, carbon dioxide, phosphorus pentoxide, and nitrogen oxides may be formed.
Hazardous reactions	Hazardous polymerisation may occur.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

The active ingredient in Folidol 450 CS is an anticholinesterase compound. Symptoms typical of cholinesterase inhibition (for all routes of entry):

Mild cases

Headache, blurred vision, weakness, sweating, mild chest pain, nausea and vomiting.

Severe cases

Cyanosis (blueness of the skin, as from lack of oxygen), muscular twitching, spasms, miosis (pinpoint pupils) and respiratory paralysis. These symptoms commence from one to three hours after excessive exposure.

Repeated minor exposure may have a cumulative poisoning effect.

While the encapsulation process per se does not alter the toxicity of the active ingredient parathion-methyl, the capsule wall protects mammalian species or humans from gross exposure to the pesticide by reducing the amount of material available for toxic action while the capsules pass through the digestive tract or through the skin by absorption. Prolonged contact may give rise to some skin effects especially if small cuts, scratches or abrasions are present. The size of the capsules prevents them from entering the respiratory system. The toxicity of encapsulated parathion-methyl is lower than that of the active ingredient. It approaches the toxicity of the active ingredient only in cases where grinding actions break up the capsules, thus freeing the active ingredient.

Inhalation	Poisonous by inhalation.
Skin contact	Poisonous if absorbed by skin contact. May irritate the skin.
Eye contact	May irritate the eyes.
Ingestion	Harmful if swallowed. Ingestion of the product may be fatal.

ANIMAL TOXICITY DATA - PRODUCT

Acute:

Oral toxicity	LD ₅₀ rat: 1335 mg/kg
Dermal toxicity	LD ₅₀ rat: > 4000 mg/kg
Inhalation toxicity	LC ₅₀ (4 h) rat: 0.12 mg/L air (<i>parathion-methyl</i>)

MATERIAL SAFETY DATA SHEET



Date of Issue: November 27, 2003

11. TOXICOLOGICAL INFORMATION - continued

Skin irritation	Mildly irritating (rabbit)
Eye irritation	Practically non irritating (rabbit)
Sensitisation	Not a skin sensitiser (guinea pig).

Chronic:

The main health effects from repeated exposure would be toxic symptoms of cholinesterase inhibition as described above. Parathion-methyl is not mutagenic, not carcinogenic and is not expected to cause reproductive or teratogenic effects.

12. ECOLOGICAL INFORMATION

Parathion-methyl is very highly toxic to birds, moderately toxic to fish and very toxic to aquatic invertebrates. It is moderately dangerous to bees. The microencapsulation of parathion-methyl in Folidol 450 CS reduces the toxicity to these species.

DO NOT contaminate streams, rivers or waterways with Folidol 450 CS or the used containers.

EcotoxicityParathion-methyl:*Fish toxicity:*

LD₅₀: 6.9 mg/L (96 h); golden orfe (*Leuciscus idus melanotus*)

LC₅₀: 2.7 mg/L (96 h); trout (*Oncorhynchus mykiss*)

Aquatic invertebrate toxicity:

EC₅₀: 0.0073 mg/L (48 h); *Daphnia magna*

Algae toxicity:

IC₅₀: 3.0 mg/L (96 h); green algae (*Scenedesmus subspicatus*)

Bird toxicity:

LD₅₀: 6 mg/kg; bobwhite quail

Folidol 450 CS:*Fish toxicity:*

LC₅₀: > 325 mg/L (96 h); trout (*Oncorhynchus mykiss*)

Aquatic invertebrate toxicity:

EC₅₀: 0.01 mg/L (48 h); *Daphnia magna*

Bird toxicity:

LD₅₀: 112.5 mg/kg; bobwhite quail

Environmental fate, persistence and degradability, mobilityParathion-methyl:

Medium to low mobility in soil. Rapidly degraded in biologically active soils. Parathion-methyl is readily degraded in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Triple or preferably pressure rinse container before disposal or recycling. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of waste product as hazardous waste via a licensed disposal contractor to an approved landfill. Do not discharge into drains or sewers.

MATERIAL SAFETY DATA SHEET

Date of Issue: November 27, 2003

14. TRANSPORT INFORMATION

Folidol 450 SC Insecticide is not classified as "Dangerous Goods" for transport by road and rail in Australia. For transport by sea, the classification below applies:

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains parathion-methyl)
Class and	9
Subsidiary Risk	None
Packing Group	III
EPG	Guide 47 – Dangerous Goods - Initial Emergency Response Guide
Hazchem code	2X
Marine Pollutant	Yes (Parathion-methyl is a Class "PP", Severe Marine Pollutant)

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988
 Australian Pesticides and Veterinary Medicines Authority approval number: 49848

See also Section 2.

16. OTHER INFORMATION

Trademark information Folidol® is a Registered Trademark of Bayer.

Preparation information Replaces August 1, 2002 MSDS.
 Reasons for revision: 16 heading format, Risk phrases, dangerous goods classification.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

END OF MSDS



Thiodan EC

Product Type	Insecticide
Active Ingredient(s)	350 g/L endosulfan
Solvent	640 g/L liquid hydrocarbon
Formulation Type	Emulsifiable concentrate
Pack Size(s)	20 L 100 L 200 L 1000 L
Chemical Group	Cyclodiene
Market Segments	Broadacre, Cotton, Horticulture
Grouping	2A
Mode of Action	GABA-gated chloride channel Inhibitor

Crop Protection

- > [Key Features](#)
- > [Downloads](#)
- > [Contacts](#)

For the control of heliothis (*Helicoverpa* spp.) and various other insect pests on cotton, oilseeds, vegetables and other crops.

Key Features

[Top ↑](#)

- ♦ A sulphurous acid ester insecticide.
- ♦ Active on a wide range of insects.
- ♦ Acts mainly as a contact and stomach poison.
- ♦ Works as a knockdown and also has residual activity.
- ♦ Reliable cost effective insect control.
- ♦ Additional chemistry for resistance management.

Product Downloads

[Top ↑](#)

These documents are in Adobe PDF format and require the Acrobat reader plugin be installed on your browser. If you do not have the Acrobat reader, [click here to download it.](#)

 **MSDS**
Material Safety Data Sheet (MSDS)
Size: 171KB





















































































 **Label**
Product Label
Size: 428KB





















































Contacts

[Top ↑](#)

Technical Enquiries
1800 804 479

Micro Flo Company LLC

Product	Labels	MSDS
Acephate 75SP AG		
Acephate 90SP		
Acephate Pro 75		
Acephate Pro 75 WSP		
Alachlor 4EC		
Assert® Herbicide		
Azinphosmethyl 50W Soluble		
Banvel-K™ + Atrazine		
Banvel-SGF®		
Banvel®		
Banvel® + 2,4-D		
Basagran® Herbicide		
Bifenthrin 2EC AG		
Bromox + Atrazine		
Bromox 2E		
Bromox-MCPA 2-2		
Captan 50 Wettable Powder		
Captan 80-WP		
Captan 80WDG		
Captec 4L		
Chlorpyrifos 15G AG		
Chlorpyrifos 2.32% Granule		
Chlorpyrifos 4E-AG		
Chlorpyrifos Pro 2		
Chlorpyrifos Pro 4		
Chlorpyrifos Pro 6 MUP		
Chlorpyrifos Pro Termite		
Clethodim 2EC		
Diazinon 14-G		
Diazinon 50W		
Diazinon 5G AG		
Diazinon AG500		
Dimethoate 267		
Dimethoate 4E		
Ethephon 2		
Ethephon 6		
Flo Met 4L		
Flo-Met® 80 DF		
Iprodione 4L AG		
Iprodione 50W AG		
Kumulus® DF Fungicide		
Laddok® S-12		

Malathion 5EC		
Malathion 8EC		
Mepichlor® 4.2% Liquid		
Metsulfuron 60EG AG		
Metsulfuron 60EG IVM		
MFX Cotton Harvest Aid		
Microperse Sulfur		
Mole Cricket Bait 1%		
Mole Cricket Bait 1/2%		
Permethrin 3.2 AG (279-3014-51036)		
Permethrin 3.2 AG (51036-434)		
PGR-IV Concentrate		
PGR-IV Plus		
PGR-IV ST Dust		
Poast Plus®		
Poast®		
Prompt® 5L		
Pyramin® DF		
Snare® Mole Cricket Bait		
Sulfur 6L		
T-Methyl 4.5F AG		
T-Methyl 70W WSB		
Thidiazuron 4 SC		
Thidiazuron 50 WSB		
Thidiazuron-Diuron EC		
Thimet® 20-G		

**Return to
Manufacturers List**

PDF files are best viewed with the current version of Acrobat Reader.



Copyright © 1996-2005,
Crop Data Management Systems, Inc.
Terms_of_Use



For Label searching by crop, pest(s), state, and a.i.



Questions
& Comments

12/6/2005

2,4D AMINE

A selective hormone-type weedkiller for the control of weeds in maize, grain sorghum, wheat and other cereals, sugarcane, lawns, golf courses and pastures.

Label
MSDS

ACETOCHLOR 700

An emulsifiable concentrate herbicide for the pre-emergence control of annual grasses and certain broadleaf weeds in maize, sweetcorn and groundnuts.

Label
MSDS

AGROQUAT

Weedkiller in the form of a solution, for the control of annual grasses and broadleaf weeds in crops as listed and for fire breaks. Inactivated on contact with soil

Label
MSDS

ALACHLOR

A pre-emergence emulsifiable concentrate weedkiller for the control of most annual grasses and certain broadleaf weeds in various crops.

Label
MSDS

ATRAFLO 500SC

Atrazine - A suspension concentrate weed killer for the control of annual broadleaf weeds and grasses in maize, grain sorghum, sugarcane and pineapples as indicated.

Label
MSDS

ATRAFLO SUPER 600SC

Atrazine - A suspension concentrate herbicide for selective control of most annual broadleaf weeds as well as goose grass in maize and grain sorghum

Label
MSDS

BLADVAL ULTRA

Sodium Chlorate - a liquid chemical defoliant to accelerate leaf drop.

Label
MSDS

EFFON

Ethepon - a solution containing a plant growth regulator for use in the crops as stipulated.

Label
MSDS

ERASE

A non-selective systemic post-emergence herbicide for the control of perennial and annual weeds in agriculture and industrial areas.

Label
MSDS

HALFRASE

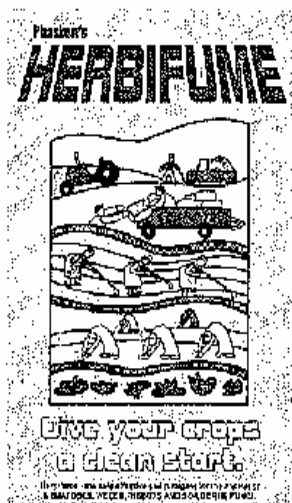
Glyphosate 180 g/l - a post-emergent herbicide for use as a selective systemic treatment on annual and certain perennial weeds.

Label

HERBIFUME

Metham-Sodium - a soil fumigant for the control of certain soil fungi, nematodes and germinating weeds seeds in agricultural and horticultural soils, seedbeds and planting media.

Label
MSDS



LINEX

Linuron - a pre and post-emergent residual herbicide in dry flowable form for the control of annual grasses and broadleaf weeds.

Label
MSDS



PARAGONE

Paraquat - a contact herbicide in solution form for the control of annual grasses and broadleaf weeds.

Label
MSDS

SULFON

A water dispersible fine granule post-emergence herbicide for control of the listed weeds

Label

TERBUZINE 600 SC

A suspension concentrate herbicide for selective control of most annual broadleaf weeds as well as goose grass in maize and grain sorghum.

Label
MSDS

ZED

A liquid chemical leaf desiccant to be used on seed and table potatoes

Brochure

Label

MSDS

MATERIAL SAFETY DATA SHEET

OSHA-MEETS 29 CFR 191.1200 STANDARDS

HMIS HAZARD RATINGS



HEALTH	2	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	2	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	

TRANSPORTATION INFORMATION

HAZARD CLASS / DIVISION:	None	REF:	Not applicable
IDENTIFICATION NUMBER:	None	LABEL:	NONE REQUIRED

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST) Shroud Herbicide		Page 1 of 2
MANUFACTURER'S NAME Cedar Chemical Corporation	EMERGENCY TELEPHONE NUMBER CHEMTREC (800) 424-8300	
ADDRESS (NUMBER, STREET, P.O. BOX) 5100 Poplar Avenue, Suite 2414	TELEPHONE NUMBER FOR INFORMATION (901) 685-6348 (870) 572-3701	
(CITY, STATE, AND ZIP CODE) Memphis, Tennessee 38137	DATE PREPARED: February 6, 2001 SUPERSEDES: None	

SECTION 2 - COMPOSITIONAL INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))	CAS #	% (OPTIONAL)	ACGIH PPM	TWA MG/M ³	OSHA PPM	CEDAR MG/M ³	SARA TITLE III	RQ LBS
2-chloro-2',6'-diethyl-N-(methylxymethyl)acetanilide (Alachlor)	15972-80-8	45.1				0.11	Yes	
Xylene (mixed)	1330-20-7		100		100		Yes	
1,2,4-trimethylbenzene	95-63-6		25				Yes	
Cumene	96-82-6		50		50		Yes	

- (a) A "YES" in the SARA TITLE III column indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. * Effective 1995.
- (b) Indicates an employee's skin exposure shall be prevented or reduced to the extent necessary in the circumstances through the use of gloves, coveralls, goggles, or other appropriate equipment.
- (c) The Workplace Hazardous Materials Information System (WHMIS), Canada's version of the Hazard Communication, has determined this product must be disclosed as a hazardous ingredient to the extent described in the regulations.
- (d) Indicates the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ) or greater amounts according to 40 CFR 302.

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS AND SYMPTOMS OF EXPOSURE	EMERGENCY AND FIRST AID PROCEDURES
INHALATION: Vapor or mist may irritate the respiratory tract. Prolonged/excessive exposure may result in CNS depression.	Move subject to fresh air. Administer artificial respiration if breathing has stopped. Consult a physician.
SKIN: May be irritating, causing redness and dry skin. Repeated or prolonged exposure may sensitize or cause an allergic skin reaction in susceptible individuals.	Remove contaminated clothing; wash affected area with soap and water. Launder contaminated clothing before reuse. If irritation persists, seek medical attention.
EYES: May cause eye irritation.	Flush eyes with water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.
INGESTION: Due to low toxicity no significant adverse effects are expected if small amounts are swallowed. Contains hydrocarbons that may cause CNS depression, headache, fatigue, dizziness, or unconsciousness if extreme exposure.	Call physician or Poison Control Center immediately. Do not induce vomiting unless directed by qualified medical personnel. If possible, dilute by giving 2 glasses of water to drink. Never give anything by mouth to an unconscious person.
HEALTH HAZARDS (ACUTE AND CHRONIC): Acute Oral LD ₅₀ (rats) 1782 mg/kg. Acute Dermal LD ₅₀ (rabbits) >5000 mg/kg. Acute Inhalation LC ₅₀ (rats) >6.5 mg/L. May be sensitizing to skin. Eye Irritation (Rabbit) corrosive/severely irritating. Skin Irritation (Rabbit) Severely irritating.	
CARCINOGENICITY: NTP? Not listed	IARC MONOGRAPHS? Not listed
OSHA REGULATED? Not listed	
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.	

MATERIAL SAFETY DATA SHEET	
IDENTITY (AS USED ON LABEL AND LIST) <i>Shroud Herbicide</i> (Container size less than 42 gallons)	Page 2 of 2 Date: February 6, 2001
SECTION 4 - FIRE FIGHTING MEASURES	
FLASH POINT (METHOD USED) 102°F TCC	FLAMMABLE LIMITS LEL: None set UEL: None set
EXTINGUISHING MEDIA CO ₂ , water, water fog, dry chemical, and chemical foam.	AUTOIGNITION TEMPERATURE Not known
SPECIAL FIRE FIGHTING PROCEDURES Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH-approved or equivalent) and full protective gear. Runoff should be contained.	
UNUSUAL FIRE AND EXPLOSION HAZARDS Fire produces noxious fumes, hydrogen chloride, chlorine, organic acids, and chloroanilines. Pesticide particulates may become airborne.	
SECTION 5 - ACCIDENTAL RELEASE MEASURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Comply with fire, explosion, safety precaution, personal protective equipment sections of this MSDS before proceeding with cleanup. Absorb material with inert material such as "oil dry" and place in suitable container. Keep out of streams, water supplies, and sewers. Contact Cedar or Chemtrec if assistance is needed. For spills in excess of allowable limits (RQ) notify the National Response Center (800) 424-8802, refer to SARA Title III, Section 313 40 CFR 372, and CERCLA 40 CFR 302 for complete regulations concerning reporting requirements.	
SECTION 6 - HANDLING AND STORAGE	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use. Protect containers from abuse and extreme temperatures. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Minimize body contact with this product as well as all chemicals in general.	
SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION	
RESPIRATORY PROTECTION (SPECIFY TYPE): Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for mist or vapor concentrations encountered.	
VENTILATION LOCAL EXHAUST: Required to control mist or vapor concentration. MECHANICAL (GENERAL): Yes	
PROTECTIVE GLOVES: Butyl rubber	EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impervious apron should be worn. Easy access to eye wash facility and safety shower.	
WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Shower after handling. Wash contaminated clothing before wearing again.	
SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES	
BOILING POINT 132°C	SPECIFIC GRAVITY (WATER = 1) 1.0621
VAPOR PRESSURE (mm Hg) 5 mmHg @ 60°F	pH Not applicable
VAPOR DENSITY (AIR = 1) Not available	EVAPORATION RATE (WATER = 1) Not available
SOLUBILITY IN WATER Emulsifiable	% VOLATILE (BY WEIGHT) Approximately 50%
APPEARANCE AND ODOR Brown liquid. Sweet aromatic odor.	
SECTION 9 - STABILITY AND REACTIVITY	
STABILITY Stable when stored under normal warehouse conditions.	CONDITIONS TO AVOID: Store above 0°C to prevent freezing & precipitation of active ingredient.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong acid may cause hydrolysis	
HAZARDOUS DECOMPOSITION PRODUCTS: Noxious fumes may form.	
HAZARDOUS POLYMERIZATION Will not occur.	CONDITIONS TO AVOID: None known
SECTION 10 - DISPOSAL CONSIDERATIONS	
WASTE DISPOSAL METHOD: Incinerate pesticide or triple rinse it that cannot be used according to label directions and contaminated diking material in a permitted facility according to current local, state, and Federal regulations.	
THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE, HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. CEDAR CHEMICAL ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS OR THIRD PARTIES CAUSED BY THE MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THE MATERIAL.	



Home / Products / herbicide / Alachlor

Alachlor

Specification

Active Ingredient	95% min., 92% min.
Appearance	Yellow white to wine red, odorless solid (room temperature) Yellow to red liquid (>40°C)

Physical and chemical properties

Chemical Name	2-chloro-2'6'-diethyl-N-methoxymethylactanilide
Empirical Formula	C ₁₄ H ₂₀ ClNO ₂
Molecular Weight	269.8
Structural Formula	
Melting point	40.5-41.5°C
Solubility	In water 242 mg/l (25°C). Soluble in diethyl ether, acetone, benzene, chloroform, ethanol, and ethyl acetate. Slightly soluble in heptane.
Vapor pressure	2.1 mPa (25°C)
Corrosive properties	
Explosive properties	
Combustible properties	

Formulations

48% (w/v) E.C.

Application

Alachlor is a selective systemic herbicide, absorbed principally by germinating shoots, but also by the roots, with translocation

Other herbi

- Terbutryne 98%
- Isoproturon 97%
- 2,4-D Sodium Salt
- 2,4-D Dimethyl 84% w/v SL
- 2,4-D Butyl E EC
- Alachlor 95% TC, 5
- Butachlor 92% TC, EC, 5% G
- Diuron 95% TC, 4t
- Metsulfuron methyl
- Atrazine 80% WP
- Glyphosate 95% A w/v SL
- Paraquat dichlorid 27.6% w/v SL, 24t
- Acetochlor 95% TC 50% E
- Propanil 97% TC, 7
- Pendimethaline 95
- Chlorsulfuron 95%
- Quinclorac 90% T
- Bentazone 95% TC
- Gliphosinate 13.5l SL, 18% w/v SL

Insectici

Fungicid

Plant Grow

Inter

Bi

throughout the plant, and accumulation mainly in vegetative parts rather than in reproductive parts.

Used pre-emergence at 1.68-4.48 kg/ha to control annual grasses and many broad-leaved weeds in cotton, brassicas, maize, oilseed rape, peanuts, radish, soya beans and sugar cane.

Material Safety Data Sheet (MSDS)

1.	chemical product and company identification
2.	composition / information on ingredients
3.	hazards identification
4.	first aid measures
5.	fire fighting measures
6.	accidental release measures
7.	handling and storage
8.	exposure controls / personal protection
9.	physical and chemical properties
10.	stability and reactivity
11.	toxicological information
12.	ecological information
13.	disposal considerations
14.	transport information
15.	regulatory information
16.	other information

 [enquire detailed MSDS of Alachlor](#)



MONSANTO COMPANY
MICRO-TECH® Herbicide

Version: 1.1

Page: 1
Effective date: 04/26/2002

MONSANTO COMPANY

Material Safety Data Sheet
Commercial Product

1. PRODUCT AND COMPANY IDENTIFICATION

Product name

MICRO-TECH® Herbicide

EPA Reg. No.

524-344

Chemical name

Not applicable

Synonyms

None

Company

MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167

Telephone: 800-332-3111, Fax: 314-694-5557

Emergency numbers

FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands. For calls originating elsewhere: 703-527-3887 (collect calls accepted).

FOR MEDICAL EMERGENCY - Day or Night: 314-694-4000 (collect calls accepted).

2. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredient

2-chloro-2',6'-diethyl-N-(methoxymethyl)acetanilide; [Alachlor]

Composition

COMPONENT	CAS No.	% by weight (approximate)
Alachlor	15972-60-8	41.5
Other ingredients		58.5

The specific chemical identity is being withheld because it is trade secret information of Monsanto Company.

OSHA Status

This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

3. HAZARDS IDENTIFICATION

Emergency overview

Appearance and odour (colour/form/odour): Tan / Liquid / Slight

RESTRICTED USE PESTICIDE due to oncogenicity.

The use of this product may be hazardous to your health. This product contains alachlor, which has been determined to cause tumours in laboratory animals.

CAUTION!

MAY CAUSE ALLERGIC SKIN REACTION

Potential health effects

Likely routes of exposure

Skin contact, eye contact

Eye contact, short term

Not expected to produce significant adverse effects when recommended use instructions are followed.

Skin contact, short term

May cause allergic skin reaction.

Refer to section 11 for toxicological and section 12 for environmental information.

4. FIRST AID MEASURES**Eye contact**

Immediately flush with plenty of water.

If easy to do, remove contact lenses.

Skin contact

Immediately wash affected skin with plenty of water.

Use soap if available.

Continue for at least 15 minutes.

Pay particular attention to skin crevices, nail folds, scalp, etc.

Take off contaminated clothing, wristwatch, jewellery.

If spilled into boots, remove immediately.

Wash clothes before re-use.

Inhalation

Remove to fresh air.

Ingestion

Immediately offer water to drink.

Never give anything by mouth to an unconscious person.

If swallowed, seek medical advice immediately and show this container or label.

5. FIRE-FIGHTING MEASURES**Flash point**

Does not flash.

Extinguishing media

Recommended: Water, foam, dry chemical, carbon dioxide (CO₂)

Unusual fire and explosion hazards

Minimise use of water to prevent environmental contamination.

Environmental precautions: see section 6.

Hazardous products of combustion

Carbon monoxide (CO), hydrogen chloride (HCl), nitrogen oxides (NO_x), hydrogen cyanide (HCN)

Fire fighting equipment

Self-contained breathing apparatus.

Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Keep all non-essential people away from affected area.

Warn everybody of toxic hazard.

Use personal protection recommended in section 8.

Environmental precautions

- Minimise spread.
- Keep out of drains, sewers, ditches and water ways.
- Notify authorities.

Methods for cleaning up

- Absorb in earth, sand or absorbent material.
- Dig up heavily contaminated soil.
- Collect in containers for disposal.
- Refer to section 7 for types of containers.
- Wash spill area with detergent and water.
- Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.

7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed.

Handling

- Only trained personnel should use this product.
- Avoid contact with skin.
- When using do not eat, drink or smoke.
- Wash hands thoroughly after handling or contact.
- Wash contaminated clothing before re-use.
- Thoroughly clean equipment after use.
- Refer to section 13 for disposal of rinse water.
- Emptied containers retain vapour and product residue.
- Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

Storage

- Minimum storage temperature: -10 °C
- Maximum storage temperature: 40 °C
- Incompatible materials for storage: mild steel, aluminium
- Keep locked up and out of the reach of children.
- Keep away from living quarters.
- Keep away from food, drink and animal feed.
- Keep only in the original container.
- Keep container tightly closed in a cool, well-ventilated place.
- Minimum shelf life: 2 years.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne exposure limits**

Components	Exposure Guidelines
Atachlor	MWPEG (Monsanto Workplace Permissible Exposure Limit): 0.11 mg/m ³ (TWA); 10 ppb (TWA) TLV (ACGIH): No specific occupational exposure limit has been established. PEL (OSHA): No specific occupational exposure limit has been established.
Other ingredients	No specific occupational exposure limit has been established.

Engineering controls

- Provide adequate ventilation to keep airborne concentration below exposure limits.

Eye protection

If there is significant potential for contact:
Wear chemical goggles.
Applicators and other handlers must wear eye protection.

Skin protection

Wear chemical resistant gloves.
If there is significant potential for contact:
Wear face shield.
Wear chemical resistant clothing/footwear.
Applicators and other handlers must wear:
Wear coveralls over long-sleeved shirt and long pants.
Wear chemical resistant footwear plus socks.

Respiratory protection

If airborne exposure is excessive:
Wear respirator.
Full facepiece/hood/helmet respirator replaces need for chemical goggles.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Colour/colour range:	Tan
Form:	Liquid
Odour:	Slight
Boiling point:	> 100 °C
Flash point:	Does not flash.
Specific gravity:	1.147 @ 20 °C / 4 °C
Solubility:	Water: Completely miscible.
pH:	~ 8.5 @ 22 °C @ 10 g/l
Partition coefficient (log Pow):	3.3 (alachlor)

10. STABILITY AND REACTIVITY**Stability**

Stable under normal conditions of handling and storage.

Hazardous decomposition

Thermal decomposition: When heated may give off toxic fumes.
Hazardous products of combustion: see section 5.

Materials to avoid/Reactivity

Corrosive to aluminium.
Corrosive to mild steel.

11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.

Data obtained on product, similar products and on components are summarized below.

Acute inhalation toxicity

Rat, LC50, 4 hours, aerosol: > 1.9 mg/L.
Slightly toxic.
FIFRA category III.
Maximum attainable concentration. No mortality.

Skin irritation

Rabbit, 3 animals, OECD 404 test:
Days to heal: 3
Primary Irritation Index (PII): 0.8/8.0
Slight irritation.
FIFRA category IV.

Eye irritation

Rabbit, 3 animals, OECD 405 test:
Days to heal: 3
Slight irritation.
FIFRA category III.

Similar formulation**Acute oral toxicity**

Rat, LD50: > 5,000 mg/kg body weight
Practically non-toxic.
FIFRA category IV.
No mortality.

Acute dermal toxicity

Rabbit, LD50: > 2,000 mg/kg body weight
Slightly toxic.
FIFRA category III.
No mortality.

Similar formulation**Skin sensitization**

Guinea pig, 9-induction Buehler test:
Positive incidence: 20 %

Alachlor**Mutagenicity**

In vitro and in vivo mutagenicity test(s):
Not mutagenic on the basis of weight-of-evidence analysis.

Repeated dose toxicity

Rabbit, dermal, 21 days:
NOAEL toxicity: 1,000 mg/kg body weight/day
Target organs/systems: pituitary
Other effects: organ weight change

Carcinogenicity

Rat, oral, 25 months:
NOEL tumour: 0.5 mg/kg body weight/day
NOAEL toxicity: 2.5 mg/kg body weight/day
Tumours: nose, stomach, thyroid
Target organs/systems: nose, eyes, liver
Other effects: histopathologic effects, blood biochemistry effects
Tumours not relevant for man based on mechanistic data.
Mouse, oral, 18 months:
NOEL tumour: 331 mg/kg body weight/day

NOAEL toxicity: 20 mg/kg body weight/day
 Target organs/systems: bone marrow, kidneys, liver
 Other effects: decrease of body weight gain, organ weight change, histopathologic effects
 No tumours.

Toxicity to reproduction/fertility**Rat, oral, 3 generations:**

NOAEL toxicity: 10 mg/kg body weight/day
 NOAEL reproduction: 30 mg/kg body weight
 Target organs/systems in parents: kidneys
 Other effects in parents: organ weight change
 Other effects in pups: none

Developmental toxicity/teratogenicity**Rabbit, oral, 7 - 19 days of gestation:**

NOEL toxicity: 100 mg/kg body weight
 NOEL development: 150 mg/kg body weight
 Other effects in mother animal: weight loss, decrease of food consumption
 Developmental effects: none

EXPERIENCE WITH HUMAN EXPOSURE**Eye contact, short term, occupational:**

Eye effects: irritation

12. ECOLOGICAL INFORMATION

This section is intended for use by ecotoxicologists and other environmental specialists.

Data obtained on product and components are summarized below.

Aquatic toxicity, fish**Rainbow trout (*Oncorhynchus mykiss*):**

Acute toxicity, 96 hours, static, LC50: 130 mg/L
 Practically non-toxic.

Common carp (*Cyprinus carpio*):

Acute toxicity, 96 hours, semi-static, LC50: 124 mg/L
 Practically non-toxic.

Aquatic toxicity, invertebrates**Water flea (*Daphnia magna*):**

Acute toxicity, 48 hours, static, EC50: 472 mg/L
 Practically non-toxic.

Aquatic toxicity, algae/aquatic plants**Green algae (*Selenastrum capricornutum*):**

Acute toxicity, 72 hours, static, ErC50 (growth rate): 0.082 mg/L
 Plant recovers when toxicant is removed. Algistatic effect observed.
 Highly toxic.

Avian toxicity**Bobwhite quail (*Colinus virginianus*):**

Acute oral toxicity, LD50: > 4,061 mg/kg body weight
 Practically non-toxic.

Bobwhite quail (*Colinus virginianus*):

Dietary toxicity, 5 days, LC50: > 9,094 mg/kg diet
 Practically non-toxic.

Mallard duck (*Anas platyrhynchos*):

Dietary toxicity, 5 days, LC50: > 9,094 mg/kg diet
 Practically non-toxic.

Arthropod toxicity**Honey bee (*Apis mellifera*):**

Contact, 48 hours, LD50: > 238 µg/bee

MONSANTO COMPANY
MICRO-TECH® Herbicide

Version: 1.1

Page: 7
Effective date: 04/26/2002

Practically non-toxic.

Honey bee (*Apis mellifera*):

Oral. 48 hours, LD50: > 214 µg/bee

Alachlor

Soil organism toxicity, invertebrates

Earthworm (*Eisenia foetida*):

Acute toxicity, 14 days, LC50: 387 mg/kg dry soil

Slightly toxic.

Bioaccumulation

Bluegill sunfish (*Lepomis macrochirus*):

Whole fish: BCF: 11

Compound aged 30 days in soil before test start. Rapid depuration after end of exposure.

No significant bioaccumulation.

Hydrolysis

25.00 °C, pH 6:

0 % within 30 days

Photochemical degradation

Soil:

Half life: 144.4 days

Dissipation

Soil, aerobic, 25 °C:

Half life: 15 - 30 days

Water:

Half life: 23 days

13. DISPOSAL CONSIDERATIONS

Product

Keep out of drains, sewers, ditches and water ways.

Recycle if appropriate facilities/equipment available.

Burn in special, controlled high temperature incinerator.

Follow all local/regional/national/international regulations.

Container

See the individual container label for disposal information.

Emptied containers retain vapour and product residue.

Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

Empty packaging completely.

Triple or pressure rinse empty containers.

Do NOT contaminate water when disposing of rinse waters.

Ensure packaging cannot be reused.

Do NOT re-use containers.

Store for collection by approved waste disposal service.

Recycle if appropriate facilities/equipment available.

Follow all local/regional/national/international regulations.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Not hazardous under the applicable DOT, ICAO/IATA, IMO, IMDG and Mexican regulations.

15. REGULATORY INFORMATION

TSCA Inventory

Exempt

OSHA Hazardous Components

Alachlor

SARA Title III Rules

Section 311/312 Hazard Categories

Immediate, Delayed

Section 302 Extremely Hazardous Substances

Not applicable.

Section 313 Toxic Chemical(s)

Alachlor

CERCLA Reportable quantity

Not applicable.

16. OTHER INFORMATION

The information given here is not necessarily exhaustive but is representative of relevant, reliable data.

Follow all local/regional/national/international regulations.

Please consult supplier if further information is needed.

In this document the British spelling was applied.

Footnotes:

- {a} EU label (Manufacturer self-classification)
- {b} EU label (Annex I)
- {c} National classification

Full denomination of most frequently used acronyms: BCF (Bioconcentration Factor), BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), EC50 (50% effect concentration), ED50 (50% effect dose), I.M. (intramuscular), I.P. (intraperitoneal), I.V. (intravenous), Koc (Soil adsorption coefficient), LC50 (50% lethality concentration), LD50 (50% lethality dose), LDLo (Lower limit of lethal dosage), LEL (Lower Explosion Limit), LOAEC (Lowest Observed Adverse Effect Concentration), LOAEL (Lowest Observed Adverse Effect Level), LOEC (Lowest Observed Effect Concentration), LOEL (Lowest Observed Effect Level), MEL (Maximum Exposure limit), MTD (Maximum Tolerated Dose), NOAEC (No Observed Adverse Effect Concentration), NOAEL (No Observed Adverse Effect Level), NOEC (No Observed Effect Concentration), NOEL (No Observed Effect Level), OEL (Occupational Exposure Limit), PEL (Permissible Exposure Limit), PI (Primary Irritation Index), Pow (Partition coefficient n-octanol/water), S.C. (subcutaneous), STEL (Short-Term Exposure Limit), TLV-C (Threshold Limit Value-Ceiling), TLV-TWA (Threshold Limit Value - Time Weighted Average), UEL (Upper Explosion Limit)

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, MONSANTO Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for the purposes prior to use. In no event will MONSANTO Company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR

MONSANTO COMPANY
MICRO-TECH® Herbicide

Version: 1.1

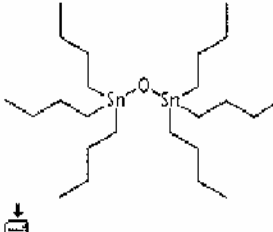
Page: 9
Effective date: 04/26/2002

A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH
RESPECT TO INFORMATION OR TO THE PRODUCT TO WHICH INFORMATION REFERS.

00000006006

Enter a name, molecular formula or cas number »more info

Find chemicals. Search by structure
Advanced Search

<p>Bis(tri-n-butyltin) oxide HBD Bis(tri-n-butyltin)oxide Bis(tributyltin) oxide Hexabutyldistannoxane tributyltin oxide for synthesis Tributyltin oxide Oxybis(tributyltin) Bis(tri-n-butyltin) oxide Bis-(tributyltin)-oxide Tributyl Tin Oxide</p>	<p>RN: 56-35-9 MF: C₂₄H₅₄O Sn₂ C₂₄H₅₄O₂Sn₂ C₂₄H₅₄O₂Sn₂ C₂₄O₅O₂Sn₂ MW: 596.07216 1405.611 bp (°C): 180 (p=2 torr) density: 1.17</p>		<p>IR: Show 3D model: Show Hazard: T N Risk: 21 25 36/38 48/23, Safety: 35 36/37/39 45 60 MSDS: EN</p>
---	--	--	--

Click on a product name to get more information on that compound, on a supplier name to get more information on that supplier.

Supplier	Description	References & Quantities
AcrosOrganics	Bis(tri-n-butyltin) oxide, stabilized 96%	5 ML Get offer 100 ML Get offer 500 ML Get offer
alkemi	Bis(tri-n-butyltin)oxide, 96%	100 g Get offer 500 g Get offer 2,5 kg Get offer
chemimpex	Bis(tributyltin) oxide	100g Get offer
lobachem	tributyltin oxide for synthesis	100 ml Get offer
matrixswitzerland	Bis(tri-n-butyltin) oxide	semi bulk Get offer bulk Get offer
lancaster	Bis(tri-n-butyltin) oxide 95, 95 *	25g Get offer 100g Get offer 500g Get offer
MerckSchuchardtOHG	Bis(tributyltin) oxide Tributyltin oxide Hexabutyldistannoxane Oxybis(tributyltin)	on request Get offer
molekula	Bis(tributyltin) oxide	100 g Get offer
yick-vic	Bis(Tri-N-Butyltin)Oxide	on request Get offer
alphachem	TRIBUTLTIN OXIDE FOR SYSTHESIS	100,00 Get offer
chemos	Bis-(tributyltin)-oxide	on request Get offer
debayer	Tributyltin oxide	Reagent,Bulk, Semi Bulk Get offer
alpha_chemika	TRIBUTLTIN OXIDE FOR SYSTHESIS	500,00 ML Get offer 100,00 ML Get offer
ieputech	Tributyltin oxide	Bulk, Semi Bulk, Reagent Get offer
abcr	Bis(tri-n-butyltin)oxide	100 g Get offer 500 g Get offer 2.5 kg Get offer
abcr	Bis(tri-n-butyltin)oxide , 96%	100 g Get offer 500 g Get offer
abcr	Bis(tri-n-butyltin)oxide	100 g Get offer 1 kg Get offer

^

Results 1-17 of 17

Chemicals Industry

Market Drivers, Challenges &
Growth Strategies Call +44 (0) 20
7343 838

MSDS

Your guide to MSDS. We've done
the work!

Chemical Suppliers

250,000 supply references for
more than 140,000 chemicals

Desiccants Man

Quality Manufacture
Activated Alumina,
Sieves

Ads by Google

Adve



Products

Our products and processes are the result of extreme attention to quality and safety, and of specific investments to which a growing portion of Group turnover is committed.

Chemical Products

ORGANIC
INTERMEDIATES

CHLORINATED
PRODUCTS

Mucochloric acid,
Methanesulphonylchloride,
Cyclohexylchloride

METHANE SULPHONIC
ACID

GRIGNARD REAGENTS

MEDA

DMDC

FLUORAROMATICS

BENZOTRIFLUORIDES

CYANURIC CHLORIDE

SODIUM DICYANAMIDE

CUSTOM SYNTHESIS
TOLL MANUFACTURING

ACTIVE
INGREDIENTS FOR
PLANT PROTECTION
PRODUCTS

HERBICIDES

- Atrazine, Simazine,
Terbuthylazine
- Ametryn, Simetryn,
Prometryn
- Chloridazon
- Molinate, Tiocarbazil*
- Trifluralin

ACARICIDES

Cyhexatin

FUNGICIDES

Benalaxil*, Chlorothalonil,
Cymoxanil,
Tetraconazole*

BIOLOGICAL PRODUCTS

* Product of Isagro

Formulations

Many formulated plant protection products are produced from active ingredients obtained from numerous producers the world over, including:

FORMULATION TYPES

WETTABLE POWDERS
(in traditional bags and hydrosolubles)

SUSPENSIONS IN SOLVENTS

SUSPENSIONS IN WATER

EMULSIONS

GRANULARS AND PELLETS

WATER DISPERSIBLE GRANULES

MICROINCAPSULATIONS

PRODUCERS

EUROPE

AgrEvo, Atofina, Basf, Bayer, Cheminova, Novartis, Nufarm, Rhône-Poulenc

JAPAN

Hokko, Kumiai, Mitsui Chem., Nihon Nohyaku, Nippon Soda, Otsuka, Rhône-Poulenc Yuka, Takeda, Tomen

USA

Abbott, Cyanamid, Dow, FMC, Griffin, Monsanto, Rhône & Haas

[Federal Register: September 1, 2005 (Volume 70, Number 169)]
[Notices]
[Page 52132-52134]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DCCID:fr01se05-109]

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. ICR-1218-0101(2005)]

1,2-Dibromo-3-Chloropropane (DBCP) Standard; Extension of the
Office of Management and Budget's (OMB) Approval of Information
Collection (Paperwork) Requirements

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Request for public comment.

SUMMARY: OSHA solicits public comment concerning its request for an
extension of the information collection requirements contained in the
1,2-Dibromo-3-Chloropropane Standard (the "DBCP" Standard) (29 CFR
1910.1044).

DATES: Comment must be submitted by the following dates:

Hard copy: Your comments must be submitted (postmarked or received)
by October 31, 2005.

[[Page 52133]]

Facsimile and electronic transmission: Your comments must be
received by October 31, 2005.

ADDRESSES: You may submit comments, identified by OSHA Docket No. ICR-
1218-0101(2005), by any of the following methods:

Regular mail, express delivery, hand delivery, and messenger
service: Submit your comments and attachments to the OSHA Docket
Office, Room N-2625, U.S. Department of Labor, 200 Constitution Avenue,
NW., Washington, DC 20210; telephone (202) 693-2350 (OSHA's TTY number
is (877) 889-5627). OSHA Docket Office and Department of Labor hours
are 8:15 a.m. to 4:45 p.m., e.t.

Facsimile: If your comments are 10 pages or fewer in length,
including attachments, you may fax them to the OSHA Docket Office at
(202) 693-1548.

Electronic: You may submit comments through the Internet at <http://ecomments>.
Follow instructions on the OSHA Webpage for

submitting comments.

Docket: For access to the docket to read or download comments or
background materials, such as the complete Information Collection
Request (ICR) (Containing the Supporting Statement, OMB-83-I Form, and
attachments), go to OSHA's Web page at <http://www.OSHA.gov>. In

addition, the ICR, comments and submissions are available for
inspection and copying at the OSHA Docket Office at the address above.
You may also contact Todd Owen at the address below to obtain a copy of
the ICR. For additional information on submitting comments, please see
the "Public Participation" heading in the SUPPLEMENTARY INFORMATION

section of this document.

FOR FURTHER INFORMATION CONTACT: Todd Owen, Directorate of Standards and Guidance, OSHA, Room N-3609, 200 Constitution Avenue, NW., Washington, DC 20210, telephone: (202) 693-2222.

SUPPLEMENTARY INFORMATION:

I. Background

The Department of Labor, as part of its continuing effort to reduce paperwork and respondent (i.e., employer) burden, conducts a preclearance consultation program to provide the public with an opportunity to comment on proposed and continuing information collection requirements in accordance with the Paperwork Reduction Act of 1995 (PRA-95) (44 U.S.C. 3506(c)(2)(A)).

This program ensures that information is in the desired format, reporting burden (time and costs) is minimal, collection instruments are clearly understood, and OSHA's estimate of the information collection burden is accurate. The Occupational Safety and Health Act of 1970 (the Act) (29 U.S.C. 651 et seq.) authorizes information collection by employers as necessary or appropriate for enforcement of the Act or for developing information regarding the causes and prevention of occupational injuries, illnesses, and accidents (29 U.S.C. 657).

On January 5, 2005, OSHA published the Standards Improvement Project--Phase II, Final rule (70 FR 1112). The final rule removed and revised provisions of standards that were outdated, duplicative, unnecessary, or inconsistent and clarified or simplified regulatory language. The final rule contained several revisions to collections of information contained in the DBCP Standard. These revisions included: updating compliance plans; allowing employers the option to post employee exposure-monitoring results instead of requiring individual notification; and eliminating the need for employers to report emergencies to OSHA and to notify OSHA when establishing a regulated area. Those changes reduced paperwork burden hours while maintaining worker protection and improving consistency among standards.

The information collection requirements specified in the DBCP Standard protect employees from the adverse health effects that may result from their exposure to DBCP. The 1,2-Dibromo-3-Chloropropane standard requires employers to: Monitor employees' exposure to DBCP; monitor employee health; and medical records; and provide employees with information about their exposures and health effects of exposure to DBCP.

II. Special Issues for Comment

OSHA has a particular interest in comments on the following issues:

- Whether the proposed information collection requirements are necessary for the proper information of the Agency's functions, including whether the information is useful;
- The accuracy of OSHA's estimate of the burden (time and costs) of the information collection requirements, including the validity of the methodology and assumptions used;
- The quality, utility, and clarity of the information collected; and
- Ways to minimize the burden on employers who must comply; for example, by using automated or other technological information collection and transmission techniques.

III. Proposed Actions

OSHA proposes to extend the Office of Management and Budget's (OMB) approval of these collections of information (paperwork) requirements

necessitated by the DBCP standard (29 CFR 1910.1044). The Agency will include this summary in its request to OMB to extend the approval of these collections of information requirements.

Type of Review: Extension of currently approved information collection requirements.

Title: 1,2-Dibromo-3-Chloropropane Standard.

OMB Number: 1218-0101.

Affected Public: Business or other for-profits; Federal Government; State, Local or Tribal Government.

Frequency: On occasion.

Average Time Per Response: 0.

Estimated Total Burden Hours: 1.

Estimated Cost (Operation and Maintenance): \$0.

IV. Public Participation--Submission of Comments on This Notice and Internet Access to Comments and Submissions

You may submit comments and supporting materials in response to this notice by (1) hard copy, (2) FAX transmission (facsimile), or (3) electronically through the OSHA Webpage. Because of security-related problems, there may be a significant delay in the receipt of comments by regular mail. Please contact the OSHA Docket Office at (202) 693-2350 (TTY (877) 889-5627) for information about security procedures concerning the delivery of submission by express delivery, hand delivery and courier service.

All comments, submissions and background documents are available for inspection and copying at the OSHA Docket Office at the above address. Comments and submissions posted on OSHA's Web page are available at <http://www.OSHA.gov>. Contact the OSHA Docket Office for

information about materials not available through the OSHA Web page and for assistance using the Web page to locate docket submissions.

Electronic copies of this Federal Register notice as well as other relevant documents are available on OSHA's Web page. Since all submission become public, private information such as social security numbers should not be submitted.

V. Authority and Signature

Jonathan L. Snare, Deputy Assistant Secretary of Labor for Occupational Safety and Health, directed the preparation of this notice. The authority

[[Page 52134]]

for this notice is the Paperwork Reduction Act of 1995 (44 U.S.C. 3506 et seq.), and Secretary of Labor's Order No. 5-2002 (67 FR 65008).

Signed at Washington, DC, on August 29, 2005.
Jonathan L. Snare,
Deputy Assistant Secretary of Labor.
[FR Doc. 05-17438 Filed 8-31-05; 8:45 am]
BILLING CODE 4510-26-M

D. Information submitted by CropLife International

Avenue Louise 143 - B-1050 - Brussels - Belgium
TEL: +32 2 542 04 10 FAX: +32 2 542 04 19 www.croplife.org

November 30, 2005

Secretariat for the Rotterdam Convention
C/o Food and Agriculture Organization
Plant Protection Service
Viale delle Terme di Caracalla
00100 Rome, Italy

Dear Mr. Van der Graaf:

Subject: On-going Trade in PIC Candidate Chemicals

I am responding on behalf of CropLife International to your request for information on the manufacture and trade of the PIC candidate chemicals referred to in your letter of October 6, 2005 and the document UNEP/FAO/RC/COP.2/INF/6.

We can confirm that the following chemicals are currently manufactured and traded internationally.

Alachlor
Cyhexatin
Dicofol
Endosulfan
Methyl parathion
Tributyl tin (biocidal uses)

We have not been able to confirm manufacture and trade for Mirex and DBCP.

Sincerely,

A handwritten signature in black ink that reads "Michael A. Morelli".

Michael A. Morelli, Ph.D.
Chair, PIC Project Team
CropLife International

cc: PIC Project Team
C Verschueren – CropLife International

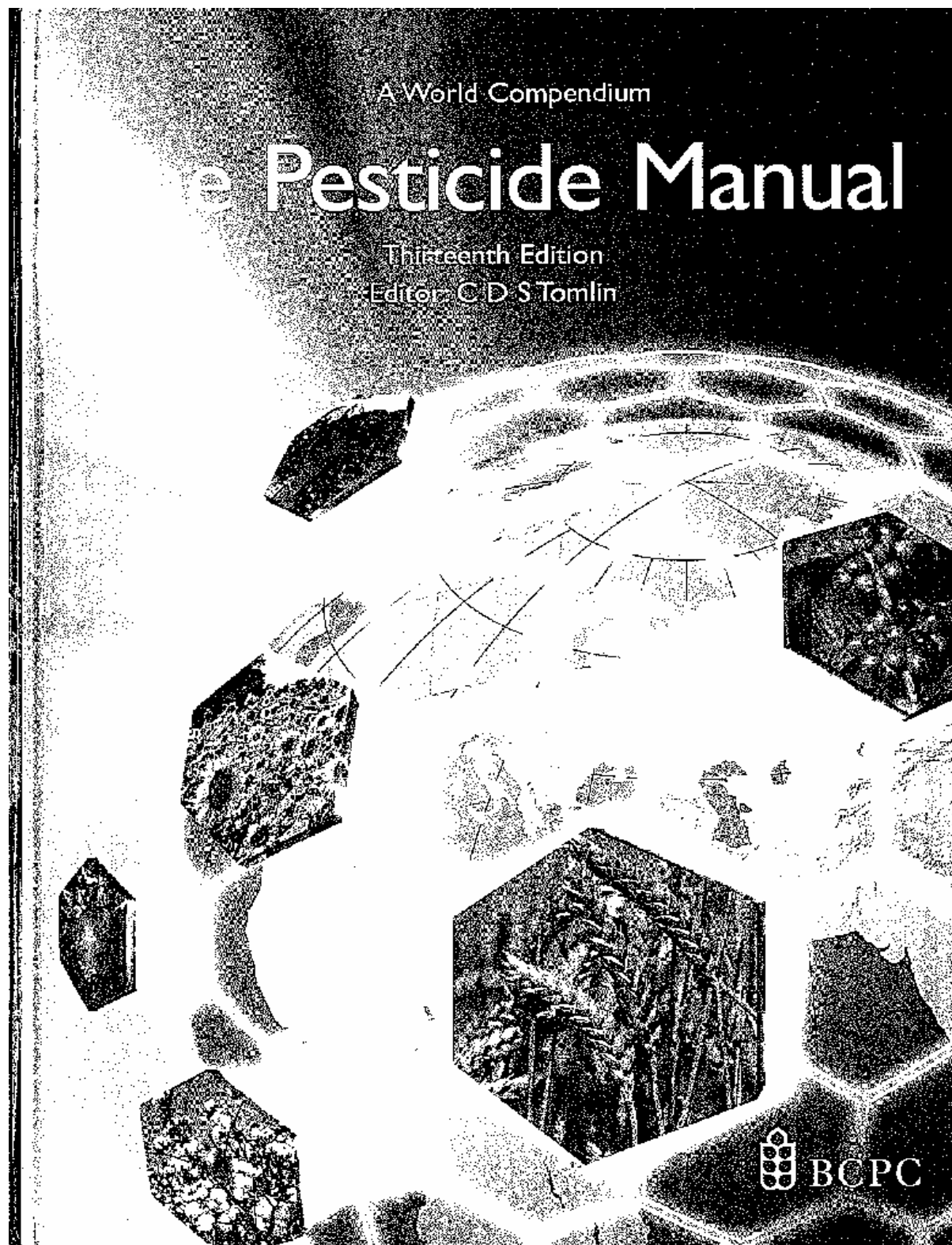
E. Information collected from the Foundation for Advancements in Science and Education (FASE)

Exports of Candidate PIC Pesticides from US Ports*

	2001	2002	2003	Total
Alachlor	3,994,931	1,742,285	225,435	5,962,651
Dicofol	60,256	49,057	66,015	175,328
Endosulfan	175,930	86,772	37,907	300,609

*Data taken from transcriptions of US Customs shipping records by the PIERS service of the Journal of Commerce. Data analysis by Foundation for Advancements in Science and Education (FASE)

F. Information on superseded entries excerpted from the thirteenth edition of The Pesticide Manual



Superseded Entries

Materials believed to be no longer manufactured, or marketed for crop protection use

These entries are short descriptions. For chemical materials, they may include the following information:

Sequential entry number.

A header name, with an indication of the type of name (such as common name, chemical name, etc.).

Chemical Abstracts Service Registry Number (CAS RN).

A sentence describing the use, an early scientific reference, and name of company inventing or developing the product.

Approved common name (if different from the name in the header, or if other common names have been approved by national bodies).

IUPAC chemical name.

Chemical Abstracts name (CA name).

Molecular formula (M.f.).

Other names.

Code numbers (development codes).

Products.

The last item of information, prefaced **Details**, gives the last Edition of *The Pesticide Manual* to contain full details of the material, with the entry or page number in that Edition.

Less information is given for materials that were discontinued more than 20 years ago.

For an explanation of this information, if needed, the Guide to using the Main Entries, p. x should be consulted.

The entries in this Section are readily identified in the indexes by an 'S' before the entry number (e.g. S1298).

It is difficult, in some cases, to be sure whether or not all commercial activity in a substance has ceased; some of these 'superseded' materials are known to be still in use for non-agricultural purposes. The Editor will be grateful for details of any materials in this Section which are still in commercial, agricultural use; he can be contacted via the publishers, or via e-mail at pm@bcpc.org.

- 1042 dialifos (common name). CAS RN [10311-84-9] Insecticide reported by W. R. Cothran et al. (*J. Econ. Entomol.*, 1967, 60, 1151). Introduced by Hercules Inc. (later Nor-Am Chemical Co.). Common names dialifos, dialiphos, dialifor. IUPAC name 5-(2-chloro-1-phthalimidoethyl) O,O-diethyl phosphorodithioate; N-[2-chloro-1-(diethoxyphosphinothioyl)ethyl]phthalimide CA name S-[2-chloro-1-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl] O,O-diethyl phosphorodithioate M.f. C₁₄H₁₇ClNO₄PS₂ Code nos. Hercules 14503 Details PM8, Entry 03980.
- 1043 di-allate (common name). CAS RN [2303-16-4] Herbicide reported by L. H. Hannah (*Proc. North Cent. Weed Control Conf.*, 1959, p. 50). Introduced by Monsanto Co. Common names di-allate, diallate. IUPAC name S-(2,3-dichloroethyl) di-isopropylthiocarbamate CA name S-(2,3-dichloro-2-propenyl) bis(1-methylethyl)carbamothioate M.f. C₁₀H₁₇Cl₂NOS Code nos. CP 15 336 (Monsanto) Products 'Avadex' * Details PM8, Entry 03990.
- 1044 diamidafos. CAS RN [1754-58-1] Nematicide reported by C. R. Youngson & C. A. I. Gorin (*Down Earth*, 1963, 18(4), 3). Introduced by Dow Chemical Co. (later DowElanco). Details PM5, p. 413.
- 1045 1,2-dibromo-3-chloropropane (IUPAC/Chemical Abstracts name). CAS RN [96-12-8] Nematicidal activity reported by C. W. McBeth & G. B. Bergeson (*Plant Dis. Rep.*, 1955, 39, 223). Introduced by Dow Chemical Co. (later DowElanco) and Shell Development Co. Common names DBCP. IUPAC name 1,2-dibromo-3-chloropropane (I) CA name (I) M.f. C₃H₅Br₂Cl Code nos. OS1897 (Shell) Products 'Fumazone' *, 'Nemagon' * Details PM6, p. 164.
- 1046 dibutyl adipate (IUPAC name). CAS RN [105-99-7] Insect repellent introduced by Union Carbide Corp. (later Rhône-Poulenc Agrochimie). CA name dibutyl hexanedioate M.f. C₁₄H₂₆O₄ Code nos. Experimental Tick Repellent 3.
- 1047 dibutyl phthalate. CAS RN [84-74-2] Activity as insect repellent reported by F. M. Snyder & F. A. Morton (*J. Econ. Entomol.*, 1947, 40, 586). Details PM5, p. 163.
- 1048 dibutyl succinate. CAS RN [141-03-7] Insect repellent introduced by Glenn Chemical Co. Details PM5, p. 164.
- 1049 dicamba-methyl (common name). CAS RN [6597-78-0] Plant growth regulator introduced by Velsicol Chemical Co. (later Sandoz AG). Common names dicamba-methyl, disugran. IUPAC name methyl 3,6-dichloro-*o*-anisate CA name methyl 3,6-dichloro-2-methoxybenzoate M.f. C₉H₉Cl₂O₃ Products 'Racuzar' *.
- 1050 dicapthon. CAS RN [2463-84-5] Insecticide reported by T. B. Davich & J. W. Apple (*J. Econ. Entomol.*, 1951, 44, 528) and by J. C. Gaines (*ibid.*, p. 750). Introduced by American Cyanamid Co. Details PM3, p. 169.
- 1051 dichlofenthion (common name). CAS RN [97-17-6] Nematicide reported by M. A. Manzelli (*Plant Dis. Rep.*, 1955, 39, 400). Introduced against soil-dwelling insects and nematodes by Virginia-Carolina Chemical Corp. Common names dichlofenthion, ECP. IUPAC name O-(2,4-dichlorophenyl) O,O-diethyl phosphorothioate CA name O-(2,4-dichlorophenyl) O,O-diethyl phosphorothioate M.f. C₁₀H₁₃Cl₂O₃PS Code nos. V-C 13 Nematicide (Virginia-Carolina) Products 'Mobilawn' * Details PM6, p. 167.
- 1052 dichlone (common name). CAS RN [117-80-6] Fungicidal properties of this established chemical reported by W. P. ter Horst & E. L. Felix (*Ind. Eng. Chem.*, 1943, 35, 1255). Introduced by Uniroyal Inc. and by FMC Corp. IUPAC name 2,3-dichloro-1,4-naphthoquinone CA name 2,3-dichloro-1,4-naphthalenedione M.f. C₁₀H₄Cl₂O₂ Code nos. USR 604 (to Uniroyal) Products 'Kolo' *, 'Phygon' * Details PM10, Entry 205.
- 1058 Superseded entries - 1052

ethylenedi-1,3,5-thiadiazinane-2-thione **CA name** 3,3'-(1,2-ethanediy)bis[tetrahydro-4,6-dimethyl-2H-1,3,5-thiadiazine-2-thione] **M.f.** C₁₂H₂₂N₄S₄ **Code nos.** Experimental Fungicide 328
Products 'Banlate' *.

1293 mipafox (common name). **CAS RN** [371-86-8] Insecticide and acaricide introduced by Pest Control Ltd (later Schering Agrochemicals). **IUPAC name** N,N'-di-isopropylphosphorodiamidic fluoride **CA name** N,N'-bis(1-methylethyl)phosphorodiamidic fluoride **M.f.** C₆H₁₆FN₂OP
Code nos. Pestox 15 **Products** 'Isopestox' *.

1294 mirex **CAS RN** [2385-85-5] Insecticide introduced by Allied Chemical Corp., Agricultural Div. (later Hopkins Ltd). **Details** PM5, p. 368.

1295 MNFA (common name). **CAS RN** [5903-13-9] Acaricide introduced by Nippon Soda Co., Ltd. **IUPAC name** 2-fluoro-N-methyl-N-1-naphthylacetamide **CA name** 2-fluoro-N-methyl-N-(1-naphthalenyl)acetamide **M.f.** C₁₃H₁₂FN₂O **Code nos.** NA-26 **Products** 'Nissol' *.

1296 monalide (common name). **CAS RN** [7287-36-7] Herbicide reported by F. Arndt (Z. Pflanzenkr. Pflanzenpathol. Pflanzenschutz, 1965, Sonderheft III, p. 277). Introduced by Schering AG (later AgrEvo GmbH). **IUPAC name** 4'-chloro-2,2-dimethylvaleraniide; 4'-chloro- α,α -dimethylvaleraniide **CA name** N-(4-chlorophenyl)-2,2-dimethylpentanamide **M.f.** C₁₃H₁₈ClNO
Code nos. Schering 35 830 (AgrEvo) **Products** 'Potablan' * **Details** PM9, Entry 8650.

1297 monisouron (common name). **CAS RN** [55807-46-0] Herbicide introduced by Shionogi & Co. Ltd. **IUPAC name** 1-(5-tert-butyl-1,2-oxazol-3-yl)-3-methylurea; 1-(5-tert-butylisoxazol-3-yl)-3-methylurea **CA name** N-[5-(1,1-dimethylethyl)-3-isoxazolyl]-N'-methylurea **M.f.** C₉H₁₅N₃O₂
Code nos. SSH-4f.

1298 monuron; monuron-TCA (common name). **CAS RN** [150-68-5] monuron (i); [140-41-0] monuron-TCA (ii) Herbicidal activity of monuron reported by H. C. Bucha & C. W. Todd (Science, 1951, 114, 493). Introduced by E. I. du Pont de Nemours and Co., and as the trichloroacetate by Allied Chemical Corp., Agricultural Division (later Hopkins Agricultural Chemical Co.).
Common names monuron, chlorfenidim*, CMU, monuron-TCA. **IUPAC name** 3-(4-chlorophenyl)-1,1-dimethylurea (i); 3-(4-chlorophenyl)-1,1-dimethyluronium trichloroacetate (ii) **CA name** N'-(4-chlorophenyl)-N,N-dimethylurea (i); trichloroacetic acid compound with N'-(4-chlorophenyl)-N,N-dimethylurea (1:1) (ii); 3-(p-chlorophenyl)-1,1-dimethylurea (i) **M.f.** C₉H₁₁ClN₂O (monuron); C₁₁H₁₂Cl₃N₂O₃ (monuron-TCA) **Code nos.** GC-2996 (Allied) (for (ii)) **Products** 'Telvar' *, 'Urox' * **Details** PM8, Entry 08680.

1299 morfamquat dichloride; morfamquat. **CAS RN** [1636-83-3] morfamquat dichloride Dichloride introduced as herbicide (H. M. Fox, Proc. Br. Weed Control Conf., 7th, 1964, 29; H. M. Fox & C. R. Beech, *ibid.*, p. 108) by ICI Plant Protection Div. (later ICI Agrochemicals). **Details** PM3, p. 355.

1300 morphodion (common name). **CAS RN** [144-41-2] Systemic insecticide introduced by Sandoz AG. **IUPAC name** O,O-dimethyl 5-morpholinocarbonylmethyl phosphorodithioate
CA name O,O-dimethyl S-[2-(4-morpholinyl)-2-oxoethyl] phosphorodithioate **M.f.** C₈H₁₆NO₄P₂
Products 'Ekatin M' *.

1301 mucochloric anhydride. **CAS RN** [4412-09-3] Fungicide reported by A. E. Rich (Plant Dis. Rep., 1960, 44, 306). Evaluated by Allied Chemical Corp., Agrochemical Div. (later Hopkins Ltd). **Details** PM2, p. 334.

1302 myclozolin (common name). **CAS RN** [54864-61-8] Fungicide reported by E.H. Pommer & B. Zeeh (Meded. Fac. Landbouwwet. Rijksuniv. Gent, 1982, 47, 935). Introduced by BASF AG.
Common names myclozolin, myclozoline. **IUPAC name** (RS)-3-(3,5-dichlorophenyl)-5-methoxymethyl-

1082 Superseded entries - 1302