

RESTRICTED USE PESTICIDE

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSON UNDER THEIR DIRECT SUPERVISION

المبيد مقيد الاستخدام

ليباعه والاستخدام فقط من قبل مرخصين أو تحت إشرافهم المباشر

دلتا بارك

DELTA PARK

PUBLIC Health Insecticide SC
مبيد صحة عامة حشري معلق



Precautionary statements

- Use spraying clothes and tools.
- Do not eat and drink the application.
- Don't spray when their children and touch it.
- Avoid the contamination through the system of water evacuation.

Keep away from children

First Aid

- If swallowed move the person to the doctor.
- If inhaled move the person to fresh air.
- If in skin remove the clothes and wash with water and soap the infected part.
- If in eyes wash the eyes with water and check with doctor.

ANTI DOSE: Non

STORAGE AND DISPOSAL

- Must get rid of its to hand it to special waste company to dispose it.
- Must store the products in his original bottles under control temperature conditions.

الضمان:
تضمن الشركة المنتجة ثبات المواصفات لهاذا المبيد وسلامته داخل عبواته الاصلية في التخزين طيلة فترة الصلاحية تحت ظروف جوية الامارات العربية المتحدة.

WARRANTY STATMENT:

The producing company guarantees the properties of the product will remain constant if it is stored in its original packing under good condition throughout the period of validity in the condition of United Arab Emirates.

وصف المبيد :

يستخدم مبيد (دلتا بارك) مبيد قليل الرائحة لمكافحة كافة الحشرات المنزلية الصاربر بأنواعها. بق الفراش، النمل والحشرات الطائرة والحشرات الخبث، والبعوض والجايبير والبعث وغيره عن طريق (الملازمة) وهو سريع الفعالية و بدون رائحة ويستخدم داخل الأماكن المغلقة والأماكن العامة ويستخدم في أجهزة الرذاذ.

Delta Park Insecticide can be used to control wide range of home pest like ,All types of cockroaches, Bed bugs ,Ants flying insects fleas wasps , mosquitoes , moths ,fast acting can be used in closed & open area , also can be used in fogging machines .

الاستخدامات :

Sites الأماكن	Pests الافات	Use Rate معدل الاستخدام	Safety period فترة الأمان
All types of Residential جميع أنواع المساكن	Flying insects, mosquitoes house flies الحشرات الطائرة البعوض، الخبث المنزلي	60 ml / (25-30) ltr water مل/ 60 لتر ماء (30-25)	One day يوم واحد
All types of Residential جميع أنواع المساكن	Crawling insects, Sticking insects Cockroaches, ants, bed bugs house flies, stored products الحشرات الزائفة والمصاصة الصراربر، بق الفراش، النمل الافات المخزونة، الخبث المنزلي	60 ml / (20-35) ltr water مل/ 60 لتر ماء (35-20)	One day يوم واحد
UVL space treatment aftermath التصويب البارد والحراري	Flying insects, mosquitoes cockroaches, house flies للحشرات الطائرة البعوض، والصراربر، الخبث المنزلي	40-50 ml / (15-10) ltr water مل/ 50-40 لتر ماء (10-5)	One day يوم واحد

رقم التسجيل لوزرة التغير
المناخي والبيئة (AUD-AD-140-1898449)
الوكيل الوحيد في الامارات



KAE

الخريف الأخضر الزراعية
الإدارة الوطني هاتف : 02-4454911
فرع الشاهمة هاتف : 02-5468568
فرع أبوها هاتف : 02-5752261
إيميل: info@alkharefa.ae

Parkers pharma limited
Riebeckstrabe 21,04317,
Leipzig Germany

Batch Number
Production Number
Expiry Number

Country of Origin : Germany

بلد المنشأ : ألمانيا

التركيب

Composition

المادة الفعالة	المادة الحاملة
Active Ingredients	الإجمالي
Deltamethrin 2.5 %	100 %
+ Teramethrin 2.5%	95%
Inert Material	Total

MATERIAL SAFETY DATA SHEET

DELTA PARK

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name : Delta Park (Deltamethrin 2.5 + Tetramethrin 2.5 SC).
Chemical group : Synthetic pyrethroid
Recommended use : Insecticide
Formulation : SC
Manufacturer Parkers Pharma Limited
Address 9 New Century Park,
Manchester, M4 4EH,
United Kingdom
E: mail id info@parkers-pharma.com
Tel 00441617590414

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HAZARDOUS SUBSTANCE (see Risk phrases below)

Combustible liquid. Contact with skin or eyes may be very painful. Dangerous to fish and bees.

Hazard designation Hazardous (National Occupational Health and Safety Commission - NOHSC) **Risk phrases** R22 - Harmful if swallowed.

R41 - Risk of serious damage to eyes.

R65 - Harmful: May cause lung damage if swallowed.

Safety phrases See Sections 4, 5, 6, 7, 8, 10, 12, and 13

ADG classification Not a "Dangerous good" for transport by road or rail according to the Australian Code for the transport of Dangerous Goods by Road and Rail.

SUSDP classification Schedule 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/L)
Deltamethrin	52918-63-5	25
Tetramethrin	7696-12-0	25

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre 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. Loosen clothes. Obtain medical advice if at all worried. If breathing stops or shows signs of failing, start artificial respiration.

Skin contact Carefully remove contaminated clothing and footwear. Wash affected areas with soap and water. Apply Vitamin E cream, toilet milks or local anaesthetic creams to reduce pain. Seek medical advice if at all worried. Launder contaminated clothing before re-use.

Eye contact Rinse eyes immediately with clean water for at least 15 minutes and obtain urgent medical aid.

Ingestion Wash out mouth with water. DO NOT induce vomiting. Give a glass of water. Do not give anything by mouth if the patient is semi-conscious or unconscious. Keep patient at rest and seek medical advice as above. Do not apply mouth to mouth resuscitation if the material has been ingested.

First Aid Facilities Ensure eyewash and safety shower facilities are available in the workplace.

Medical attention Symptoms

Local: Skin and eye paraesthesiae, which may be severe. Usually transient with resolution within 24 hours.

Systemic: Dizziness, headache, listlessness, nausea, anorexia and vomiting, epigastric pain, muscular fasciculation of limbs, anaesthesia or other CNS effects; also, upper respiratory tract irritation, pulmonary oedema, unconsciousness, convulsions, coma with very high doses/exposures.

Treatment

Local: Skin – apply Vitamin E cream or simple toilet milks.

Eyes - Instil local anaesthetic drops e.g. 1% amethocaine hydrochloride eye drops. Give analgesics as necessary.

Systemic: Monitor respiratory and cardiac functions. Observe electrocardiograph, and check for pulmonary oedema in event of inhalation.

Gastric lavage and charcoal administration. (Paraesthesiae of mouth, tongue, larynx and pharynx may be present.) As this product contains hydrocarbon solvents, care should be taken to prevent pulmonary aspiration. End tracheal intubation, and artificial respiration, as necessary. Anti-convulsant therapy with diazepam i.v. No specific antidote.

Contraindications – adrenergic compounds, atropine.

Recovery should be spontaneous.

Must NOT be confused with organophosphorus (anticholinesterase) compounds.

5. FIRE FIGHTING MEASURES

Hazards from combustion products

Heating/combustion will generate oxides of carbon and nitrogen, bromine compounds and other irritant and toxic fumes.

Precautions for fire fighters

The product is a Class C1 Combustible liquid. Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Avoid spraying directly into containers due to danger of boil over. 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. Do not release contaminated water into the environment.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with the spilled material or contaminated surfaces. Extinguish or remove all possible sources of ignition.

When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment as described in Section

8 personal protection. Keep people and animals away. 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 labeled, sealed drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

7. HANDLING AND STORAGE

Handling Keep out of reach of children. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour. If product in eyes washes it out immediately with 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, goggles and contaminated clothing.

Storage Store in the closed, original container in a cool, secure, well-ventilated area. Do not store for prolonged periods in direct sunlight. Keep away from all ignition sources.

Flammability Combustible liquid, Class C1 - flashpoint above 34° C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards Recommended Occupational Exposure Standard for Deltamethrin of 0.28 g/m³. The recommended Occupational Exposure Limits for solvents are as under:

Solvent naphtha (petroleum), heavy aromatic: TWA: 100 mg/m³ (17 ppm). For the naphthalene present in the solvent the NOHSC Occupational Exposure Limits are: TWA: 10 ppm (52 mg/m³, STEL: 15 ppm (79 mg/m³). Skin notation.

Definitions:

Exposure standard – Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Exposure standard – Short term exposure limit (STEL) means a 15 minute TWA exposure which should not be exceeded at any time during the working day.

Skin notation – Absorption through the skin may be a significant source of exposure.

Engineering controls Control process conditions to avoid contact. Use in a well-ventilated area only.

Personal Protective Equipment

It is important to protect eyes and skin as contact with this product may cause severe pain.

- _ Wear face shield
- _ Wear cotton overalls buttoned to the neck and wrist and a washable hat.
- _ Wear elbow-length PVC gloves.
- _ If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator suitable for organic vapours - AS/NZS 1715/1716 approved.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear yellow liquid
Odour	: Distinctive
pH	: 4.5 to 7.1 (5% in water)
Vapour pressure	: 0.3 kPa at 38 ° C (hydrocarbon solvent)

Vapour density	: > 1.0 (hydrocarbon solvent)
Boiling point	: N.A
Freezing/melting point	: Not available
Solubility	: Forms an emulsion in water
Specific Gravity	: 0.912 at 20° C
Flash Point	: 41° C (Closed Cup)
Flammability (explosive) limits	: LEL: 0.6; UEL: 7.0 Vol. % in air (hydrocarbon solvent)
Auto-ignition temperature	: >400°C
Partition coefficient (octane/water)	: <i>Deltamethrin</i> : $K_{ow}logP = 4.6$ (25° C)

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions of use.
Hazardous polymerization	: Will not polymerize.
Conditions to avoid	: Avoid sources of ignition and extreme heat.
Incompatible materials	: Avoid oxidizing agents, strong acids and alkalis.
Hazardous decomposition products	: Heating/combustion will generate oxides of carbon and nitrogen, and Bromine compounds.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation: Inhalation of product vapour may cause transient irritation of mucous membranes (nose, throat and respiratory tract), may cause headaches, dizziness, drowsiness, could be anaesthetic, and may have other central nervous system effects lasting for up to 24 hours.

Skin contact: Irritating. Contact with the skin, especially the face, may result in initial stinging, burning or itching sensations (fingertips, nose), followed by numbness or pain which may persist for up to 24 hours. (Although skin irritation tests in animals show *Deltamethrin* to be non-irritating, experience has shown it to cause these symptoms on human skin.) Repeated exposure may cause skin dryness or cracking.

Eye contact May be severely irritating to the eyes.

Ingestion Symptoms include burning sensations and numbness in the mouth and throat, headache, dizziness, drowsiness, diarrhea, nausea, vomiting, listlessness, stomach pain, muscular twitching of arms or legs, unconsciousness, convulsions, and coma (very high doses). Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

ANIMAL TOXICITY DATA – PRODUCT

Acute: Oral toxicity	: LD ₅₀ rat: 6480 mg/kg (<i>similar product</i>)
Dermal toxicity	: LD ₅₀ rabbit: > 2000 mg/kg (<i>similar product</i>)
Inhalation toxicity	: LC ₅₀ rat: > 11.3 mg/L (6 h) (<i>similar product</i>)
Skin irritation	: Slightly irritating (rabbit) (<i>similar product</i>)
Eye irritation	: Irritating (rabbit) (<i>similar product</i>)
Sensitization	: Non-sensitizing (guinea pig) (<i>similar product</i>)

Chronic: Deltamethrin is not mutagenic, carcinogenic or teratogenic. This product contains naphthalene. A National Toxicology Program (NTP) report states that lifetime inhalation exposure to naphthalene resulted in increases in tumours of the nose in rats. In a previous NTP study, lifetime inhalation exposure to naphthalene increased lung tumours in female mice. The relevance of the rodent findings to humans is questionable.

12. ECOLOGICAL INFORMATION

Deltamethrin is highly toxic to fish, aquatic organisms and bees in laboratory studies, but considered less toxic under natural conditions. DO NOT contaminate streams, rivers or waterways with Deltamethrin 2.5EC or the used containers.

Ecotoxicity Deltamethrin:

Fish toxicity:

LC₅₀ (96 h) 0.001 – 0.01 mg/L

Bird toxicity:

Acute oral LD₅₀ for duck > 5000 mg/kg

Acute oral LD₅₀ for quail > 10000 mg/kg

Environmental fate, persistence and degradability

Deltamethrin is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in the food chain. The hydrocarbon solvent is volatile and will evaporate if released into water. It is biodegradable.

13. DISPOSAL CONSIDERATIONS

When returnable container is empty or contents no longer required return it to the point of purchase. For non-returnable containers, triple or (preferably) pressure rinse them before disposal. Add rinsing 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 through a reputable waste contractor.

14. TRANSPORT INFORMATION

UN number	2903
Proper shipping name	: Pesticide, Liquid, Toxic, Flammable Nos (Deltamethrin and aromatic hydrocarbon)
Class	: 6.1
Packing Group	III
Marine Pollutant (P, PP, No)	: P
Subsidiary risk	3

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988
National Registration Authority approval number: 51849 see also Section 2.

16. OTHER INFORMATION

Preparation information

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.



AUD-AD-140-1898449 : رقم التسجيل : قطاع التنوع الغذائي
05-01-2022 : التاريخ : إدارة التنمية والصحة الزراعية

مفيد	كيميائي	شهادة تسجيل مبيد
		مبيد صحة عامة (حشري)
		تشهد وزارة التغير المناخي والبيئة بأن المبيد بالمواصفات التالية
		الاسم التجاري للمبيد : DELTA PARK
		بلد التسجيل: ألمانيا
		المواد الفعالة وتركيزها : DELTAMETHRIN 2.5%+TETRAMETHRIN 2.5%
		CAS RN : 7696120,52918635
		صورة المستحضر : SC
		حجم العبوة : 500,1000 مليلتر
		بلد (التسجيل/المنشأ) والشركة المنتجة : ألمانيا - PARKERS PHARMA LIMITED
		الشركة المحلية المستوردة : الخريف الاخضر الزراعية
		تاريخ إصدار الشهادة : 05-01-2022
		صالحة حتى : 31-12-2024
		ملاحظات : لا يوجد

وجد مطابقا لنظام تسجيل المبيدات المتبع لديها وقد أعطيت له هذه الشهادة بناء على ذلك.

ملاحظات :

• بعد تقييم المبيد كل خمس سنوات حتى يتم تجديد هذه الشهادة بعد ذلك.
تلغى هذه الشهادة في حالة شطب أو سحب المبيد من قبل المنظمات والهيئات العالمية المختصة في تسجيل المبيد أو ثبت للوزارة تدهور المبيد أثناء فترة صلاحيته تحت الظروف البيئية للدولة أو ثبت أن لديه آثار جانبية ضارة

سددت الرسوم 2451.06 درهم

رقم إيصال الشهادة : 13333715546335483003

تاريخ إيصال الشهادة : 29-11-2021

مدير إدارة الشؤون البلدية

رمز التحقق :



للتحقق من صحة بيانات هذا
المستند يرجى مسح الشيفرة
أو زيارة موقع الوزارة

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هذا المستند معتمد إلكترونياً ولا يحتاج الي توقيع أو ختم

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RESTRICTED USE PESTICIDE
FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSON
UNDER THEIR DIRECT SUPERVISION

المبيد مقيد الاستخدام
ليبيعته والاستخدام فقط من قبل مرخصين أو تحت إشرافهم المباشرين

دلتا بارك

DELTA PARK

PUBLIC Health Insecticide SC
مبيد صحة عامة حشري مركز معلق



التركيب

المادة الفعالة
دلتا مثرين 2.5 %
+ تيرامثرين 2.5 %
المادة الحاملة
الإجمالي 95 %
Total 100 %

التركيب

المادة الفعالة
دلتا مثرين 2.5 %
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إحتياطات التداول والاستخدام

- Use spraying clothes and tools.
- Do not eat and drink the application.
- Don't spray when their children and touch it.
- Avoid the contamination through the system of water evacuation.
- Keep away from children

- استخدام الملابس الواقية والنظارات والكمامات.
- عدم الأكل والشرب خلال عملية الرش.
- عدم الرش بوجود الأطفال وتجنب ملامستهم للأشياء.
- تجنب تلوث مياه نظام تصريف المياه للطرز.
- يحفظ بعيداً عن الأطفال.

الإسعافات الأولية

- If swallowed move the person to the doctor.
- If inhaled move the person to fresh air.
- If in skin remove the clothes and wash with water and soap the infected part.
- If in eyes wash the eyes with water and check with doctor.

- عند الابتلاع يجب نقل المصاب إلى الطبيب.
- عند الاستنشاق نقل المصاب إلى الهواء الطيب.
- عند ملامسة الجلد تغسل الملامس الملوثة وتغسل العنق المصاب جيداً بالماء والصابون.
- عند ملامسة العينين يغسل العينين جيداً بكثرة وافرة من الماء ويحب مرتاحاً للطبيب.

ANTI DOSE : Non

الجرعة المضادة، لا يوجد

التخزين والتخلص من العبوات

- Must get rid of its to hand it to special waste company to dispose it.
- Must store the products in his original bottles under control temperature conditions.

- يجب تخزين المنتج بعنقائه الأصلية تحت درجات حرارة متحكم بها.
- يجب التخلص من العبوات بتسليمها إلى شركة المتخصصة في التخلص من العبوات الكيميائية.

ضمان

تضمن الشركة المنتجة نيات المواصفات لمعاد المبيد وسلامته داخل عبواته الأصلية في التخزين طيلة فترة الصلاحية تحت ظروف دولة الإمارات العربية المتحدة .

WARRANTY STATMINT:

The producing company guaranties the properties of the product will remain constant if it is stored in its original packing under good condition throughout the period of validity in the condition of United Arab Emirates.

وصف المبيد :
يستخدم مبيد (دلتا بارك) مبيد قاتل الراتحة لمخاضة خاصة الافات المنزلية الصراصير ، البعوض ، بق الفراش ، النمل والكشراف الطالقة والحشرات الذباب ، والباعوض والذباب والبعث وغيره عن طريق (الملامسة) وهو سريع الفعالية وبدون رائحة ويستخدم داخل الأماكن المغلقة والأماكن العامة ويستخدم في أجهزة الرذاذ.

Delta Park Insecticide can be used to control wide range of home pest like , All types of cockroaches , Bed bugs , Ants flying insects fleas wasps , mosquitoes , moths . fast acting can be used in closed & open area , also can be used in fogging machines .

الاستخدامات :

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All types of Residential جميع أنواع المساكن	Crawling insects, Sucking insects Cockroaches , ant , bed bugs house flies , stored products pest الحشرات الزاحفة والماصة الصرصور ، بق الفراش ، النمل الافات المنزلية ، الافات المنزلية	60 ml / (20-25) ltr water / كل 50 لتر ماء (25-20)	One day يوم واحد
ULV space treatment thermal التصبيب البارد والحراري	Flying insects, mosquitoes cockroaches , house flies الحشرات الطائرة البعوض ، الصراصير ، الذباب المنزلي	40-50 ml / (5-10) ltr water / كل 50-40 لتر ماء (10-5)	One day يوم واحد

Ministry of Climate Change
& Environment REG (AUD-AD-140-1898449)
Manufacture :



Parkers pharma limited
Riebeckstrabe 21,04317,
Leipzig Germany

Batch Number
Production Number
Expiry Number

Country of Origin : Germany

رقم التسجيل بوزارة الخليج
الصناعات والبيئة (AUD-AD-140-1898449)
الوكيل الوحيد في الامارات



الخريف الأخضر للزراعية
الإدارة الإوطبي هاتف : 02-4454911
فرع الشهامة هاتف : 02-5468568
فرع ليوا هاتف : 02-5752261
ايميل : info@alkharaee.ae

رقم التشفير
تاريخ الإنتاج
تاريخ الانتهاء

بلد المنشأ : ألمانيا

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Tetramethrin	7696-12-0	25

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre 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. Loosen clothes. Obtain medical advice if at all worried. If breathing stops or shows signs of failing, start artificial respiration.

Skin contact Carefully remove contaminated clothing and footwear. Wash affected areas with soap and water. Apply Vitamin E cream, toilet milks or local anaesthetic creams to reduce pain. Seek medical advice if at all worried. Launder contaminated clothing before re-use.

Eye contact Rinse eyes immediately with clean water for at least 15 minutes and obtain urgent medical aid.

Ingestion Wash out mouth with water. DO NOT induce vomiting. Give a glass of water. Do not give anything by mouth if the patient is semi-conscious or unconscious. Keep patient at rest and seek medical advice as above. Do not apply mouth to mouth resuscitation if the material has been ingested.

First Aid Facilities Ensure eyewash and safety shower facilities are available in the workplace.

Medical attention Symptoms

Local: Skin and eye paraesthesiae, which may be severe. Usually transient with resolution within 24 hours.

Systemic: Dizziness, headache, listlessness, nausea, anorexia and vomiting, epigastric pain, muscular fasciculation of limbs, anaesthesia or other CNS effects; also, upper respiratory tract irritation, pulmonary oedema, unconsciousness, convulsions, coma with very high doses/exposures.

Treatment

Local: Skin – apply Vitamin E cream or simple toilet milks.

Eyes - Instil local anaesthetic drops e.g. 1% amethocaine hydrochloride eye drops. Give analgesics as necessary.

Systemic: Monitor respiratory and cardiac functions. Observe electrocardiograph, and check for pulmonary oedema in event of inhalation.

Gastric lavage and charcoal administration. (Paraesthesiae of mouth, tongue, larynx and pharynx may be present.) As this product contains hydrocarbon solvents, care should be taken to prevent pulmonary aspiration. End tracheal intubation, and artificial respiration, as necessary. Anti-convulsant therapy with diazepam i.v. No specific antidote.

Contraindications – adrenergic compounds, atropine.

Recovery should be spontaneous.

Must NOT be confused with organophosphorus (anticholinesterase) compounds.

5. FIRE FIGHTING MEASURES

Hazards from combustion products

Heating/combustion will generate oxides of carbon and nitrogen, bromine compounds and other irritant and toxic fumes.

Precautions for fire fighters

The product is a Class C1 Combustible liquid. Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Avoid spraying directly into containers due to danger of boil over. 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. Do not release contaminated water into the environment.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with the spilled material or contaminated surfaces. Extinguish or remove all possible sources of ignition.

When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment as described in Section

8 personal protection. Keep people and animals away. 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 labeled, sealed drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

7. HANDLING AND STORAGE

Handling Keep out of reach of children. Will irritate the eyes and skin. Avoid contact with eyes and skin.

Do not inhale vapour. If product in eyes washes it out immediately with 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, goggles and contaminated clothing.

Storage Store in the closed, original container in a cool, secure, well-ventilated area. Do not store for prolonged periods in direct sunlight. Keep away from all ignition sources.

Flammability Combustible liquid, Class C1 - flashpoint above 34° C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards Recommended Occupational Exposure Standard for Deltamethrin of 0.28 g/m³. The recommended Occupational Exposure Limits for solvents are as under:

Solvent naphtha (petroleum), heavy aromatic: TWA: 100 mg/m³ (17 ppm). For the naphthalene present in the solvent the NOHSC Occupational Exposure Limits are: TWA: 10 ppm (52 mg/m³, STEL: 15 ppm (79 mg/m³). Skin notation.

Definitions:

Exposure standard – Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Exposure standard – Short term exposure limit (STEL) means a 15 minute TWA exposure which should not be exceeded at any time during the working day.

Skin notation – Absorption through the skin may be a significant source of exposure.

Engineering controls Control process conditions to avoid contact. Use in a well-ventilated area only.

Personal Protective Equipment

It is important to protect eyes and skin as contact with this product may cause severe pain.

- _ Wear face shield
- _ Wear cotton overalls buttoned to the neck and wrist and a washable hat.
- _ Wear elbow-length PVC gloves.
- _ If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator suitable for organic vapours - AS/NZS 1715/1716 approved.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear yellow liquid
Odour	: Distinctive
pH	: 4.5 to 7.1 (5% in water)
Vapour pressure	: 0.3 kPa at 38 ° C (hydrocarbon solvent)

Vapour density	: > 1.0 (hydrocarbon solvent)
Boiling point	: N.A
Freezing/melting point	: Not available
Solubility	: Forms an emulsion in water
Specific Gravity	: 0.912 at 20° C
Flash Point	: 41° C (Closed Cup)
Flammability (explosive) limits	: LEL: 0.6; UEL: 7.0 Vol. % in air (hydrocarbon solvent)
Auto-ignition temperature	: >400°C
Partition coefficient (octane/water)	: <i>Deltamethrin</i> : $K_{ow} \log P = 4.6$ (25° C)

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions of use.
Hazardous polymerization	: Will not polymerize.
Conditions to avoid	: Avoid sources of ignition and extreme heat.
Incompatible materials	: Avoid oxidizing agents, strong acids and alkalis.
Hazardous decomposition products	: Heating/combustion will generate oxides of carbon and nitrogen, and Bromine compounds.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation: Inhalation of product vapour may cause transient irritation of mucous membranes (nose, throat and respiratory tract), may cause headaches, dizziness, drowsiness, could be anaesthetic, and may have other central nervous system effects lasting for up to 24 hours.

Skin contact: Irritating. Contact with the skin, especially the face, may result in initial stinging, burning or ingling sensations (fingertips, nose), followed by numbness or pain which may persist for up to 24 hours. (Although skin irritation tests in animals show *Deltamethrin* to be non-irritating, experience has shown it to cause these symptoms on human skin.) Repeated exposure may cause skin dryness or cracking.

Eye contact May be severely irritating to the eyes.

Ingestion Symptoms include burning sensations and numbness in the mouth and throat, headache, dizziness, drowsiness, diarrhea, nausea, vomiting, listlessness, stomach pain, muscular twitching of arms or legs, unconsciousness, convulsions, and coma (very high doses). Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

ANIMAL TOXICITY DATA – PRODUCT

Acute: Oral toxicity	: LD ₅₀ rat: 6480 mg/kg (<i>similar product</i>)
Dermal toxicity	: LD ₅₀ rabbit: > 2000 mg/kg (<i>similar product</i>)
Inhalation toxicity	: LC ₅₀ rat: > 11.3 mg/L (6 h) (<i>similar product</i>)
Skin irritation	: Slightly irritating (rabbit) (<i>similar product</i>)
Eye irritation	: Irritating (rabbit) (<i>similar product</i>)
Sensitization	: Non-sensitizing (guinea pig) (<i>similar product</i>)

Chronic: Deltamethrin is not mutagenic, carcinogenic or teratogenic. This product contains naphthalene. A National Toxicology Program (NTP) report states that lifetime inhalation exposure to naphthalene resulted in increases in tumours of the nose in rats. In a previous NTP study, lifetime inhalation exposure to naphthalene increased lung tumours in female mice. The relevance of the rodent findings to humans is questionable.

12. ECOLOGICAL INFORMATION

Deltamethrin is highly toxic to fish, aquatic organisms and bees in laboratory studies, but considered less toxic under natural conditions. DO NOT contaminate streams, rivers or waterways with Deltamethrin 2.5EC or the used containers.

Ecotoxicity Deltamethrin:

Fish toxicity:

LC₅₀ (96 h) 0.001 – 0.01 mg/L

Bird toxicity:

Acute oral LD₅₀ for duck > 5000 mg/kg

Acute oral LD₅₀ for quail > 10000 mg/kg

Environmental fate, persistence and degradability

Deltamethrin is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in the food chain. The hydrocarbon solvent is volatile and will evaporate if released into water. It is biodegradable.

13. DISPOSAL CONSIDERATIONS

When returnable container is empty or contents no longer required return it to the point of purchase. For non-returnable containers, triple or (preferably) pressure rinse them before disposal. Add rinsing 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 through a reputable waste contractor.

14. TRANSPORT INFORMATION

UN number	2903
Proper shipping name	: Pesticide, Liquid, Toxic, Flammable Nos (Deltamethrin and aromatic hydrocarbon)
Class	: 6.1
Packing Group	III
Marine Pollutant (P, PP, No)	: P
Subsidiary risk	3

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988

National Registration Authority approval number: 51849 see also Section 2.

16. OTHER INFORMATION

Preparation information

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.
