


Safety Data Sheet

PIRITEK - Reg. No: L 10459 (Act No 36 of 1947)

Date of issue: 19/09/2018

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	PIRITEK
Other means of identification:	2757
UN number:	Crop protection product, insecticide.
Recommended use:	For use as an Agricultural remedy only.
Restrictions on use:	2757
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	2-dimethylamino-5,6-dimethylpyrimidin-4-yl dimethylcarbamate
2) Classification of the substance / mixture:	
Classification of the product:	Acute toxicity (Oral): Category 3 Eye irritation: Category 2 Acute toxicity (Inhalation): Category 4 Carcinogenicity: Category 2 Acute aquatic toxicity: Category 1 Chronic aquatic toxicity: Category 1
Label elements:	<p>Pictogram:</p>  <p>Signal word: Danger</p> <p>Hazard statements:</p> <p>H301: Toxic if swallowed. H319: Causes serious eye irritation. H332: Harmful if inhaled. H351: Suspected of causing cancer. H410: Very toxic to aquatic life with long lasting effects</p> <p>Precautionary statements:</p> <p>P102: Keep out of reach of children.</p>

	<p>P201: Obtain special instructions before use. P261: Avoid breathing dust / fume / gas/ mist/ vapour/ spray. P280:Wear protective gloves / protective clothing / eye protection P301/ P310: If SWALLOWED: Immediately call a POISON CENTER or doctor / physician. P305 / P351 / P338: If in EYE: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 / P313: If eye irritation persists: Get medical advice / attention. P391: Collect spillage. P501: Dispose of contents / container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.</p> <p>Hazard Symbols: N: Dangerous for the environment. T: Toxic Xi: Irritant</p> <p>R-phrases(s): R 20: Harmful by inhalation. R 25: Toxic if swallowed. R 36: Irritating to eyes. R43: May cause sensitisation by skin contact. R50/53: Very toxic to aquatic organisms, may cause long – term adverse effects in the aquatic environment.</p> <p>S-phrases(s): S1/2: Keep locked up and out of reach of children. S13: Keep away from food, drink and animal feeding stuffs. S20/21: When using, do not eat drink or smoke. S26: In case of contact with eyes, rinse immediately with plenty of water. S35: This material and its container must be disposed of in a safe way. S36/37/39: Wear suitable protective clothing, gloves and eye / face protection. S45: In case of an accident or if you feel unwell, seek medical advice. S61: Avoid release to the environment. Refer to special instructions/ Safety data sheets.</p> <p>Supplemental Information: EUH401: To avoid risk to human health and the environment comply with the instructions for use. EUH208: Contains Pirimicarb. May produce an allergic reaction.</p> <p>Other Hazards: May form flammable dust-air mixture. This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds.</p>
Health effects: eyes:	Mild irritant
Health effects: skin:	Moderate irritant.
Health effects: ingestion	May be harmful
Health effects: inhalation	No irritation
Health effects: Other	No data available
3) COMPOSITION / INFORMATION ON INGREDIENTS:	

Mixture:

Chemical name	Concentration	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Pirimicarb	500 g/kg	23103-98-2	245-430-1	Acute Tox. 3 H301: Toxic if swallowed Aquatic Acute 1: H400: Very toxic to aquatic life Aquatic Chronic 1 H410: Very toxic to aquatic life with long lasting effects
Anhydrous sodium acetate	100 g/L	127-09-3	204-823-8	Eye Irrit. 2 H319: Causes serious eye irritation. Acute Tox. 4 H332:Harmful if inhaled H302: Harmful if swallowed Stot SE 2 H371: May cause damage to organs (not specified) STOT Single Exp.3 H336: May cause drowsiness or dizziness.

Full text of R- and S-phrases: see section 15.

4) First Aid Measures:

<p>Eye contact:</p> <p>Skin contact:</p> <p>Ingestion:</p> <p>Inhalation:</p> <p>Most important symptoms and effects, acute and delayed:</p> <p>Indication of immediate medical attention and special treatment needed: Advice to physician</p>	<p>If in eyes, hold eyelids open and wash with copious amounts of clean water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue to rinse the eye. Seek medical advice.</p> <p>Wash affected areas thoroughly with soap and cold water immediately, followed by alcohol. Do not rub skin. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice. Emergency personnel should wear gloves and avoid contamination.</p> <p>Seek medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If swallowed, rinse mouth thoroughly with water if the patient is alert and able. If the patient is alert and respiration is not depressed, give syrup of Ipecac followed by water or activated charcoal if instructed to do so by a medical practitioner. If vomiting occurs, keep the patients head below their hips to prevent aspiration. Establish and maintain the airway.</p> <p>Remove affected person to fresh air, keep the patient calm, warm and at rest. If breathing is difficult, give oxygen. Administration of oxygen must be applied by a qualified person. If breathing stops, call an ambulance and apply artificial respiration. Seek medical attention immediately.</p> <p>This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds.</p> <p>Pirimicarb is a carbamate compound, which inhibits cholinesterase. Systemic effects may begin within a few minutes or several hours of exposure. If consciousness level declines or vomiting has not occurred in 15 minutes, empty stomach by gastric lavage. Do not use opiates, barbiturates or morphine. Very close supervision of the patient is indicated for at least 48 – 72 hours.</p> <p>Antidote: Administer atropine sulphate intravenously or intramuscularly. In moderate to severe poisoning administer</p>
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	<p>atropine sulphate, 0.4 to 2.0 mg repeated every 15 minutes, until atropinization is achieved (dry, flushed skin, dry mouth and tachycardia). Maintain atropinization by repeated doses for 2 to 12 hours, or longer, depending on the severity of poisoning.</p> <p>Treat symptomatically and give supportive therapy. Consider taking venous blood for determination of blood cholinesterase activity (use heparin tube). Since there is no therapeutic effect, the use of oxime preparations (or other cholinesterase reactivators) is contraindicated.</p>
5) Fire-Fighting Measures:	
Suitable extinguishing media:	Water fog, foam, carbon dioxide or dry chemical.
Unsuitable extinguishing media:	Avoid strong water jets - airborne dusts may be an explosion hazard.
Special hazards arising from the substance or mixture:	Fire may produce irritating or poisonous vapours, mists or other products of combustion. Avoid breathing fumes
Fire-fighting:	Remove spectators from the surrounding area. Isolate the affected area and evacuate downwind. Keep upwind. Use the appropriate type of extinguisher for the type of surrounding fire. Fight the fire from the maximum distance using an unmanned hose holder or monitor hoses. Keep containers cool by spraying with water. Contain run off to prevent entry into water or drainage systems. Avoid inhaling hazardous vapours and fumes from the burning materials. Remove unaffected containers from the fire area if possible and if safe to do so. Use as little water as possible. Dyke the fire control water for later disposal. Avoid the accumulation of polluted run-off from the site of the incident.
Protective clothing:	Full protective clothing and self-contained breathing apparatus
6) Accidental Release Measures:	
Personal precautions:	Wear protective clothing. Avoid contact with skin, eyes and clothing. Remove any contaminated clothing and shoes immediately.
Environmental precautions:	Collect spilled material and waste in sealable open-top type containers for disposal. Recover the product by sweeping up or vacuuming without raising dust.
Cleaning procedure:	Wear protective clothing. Clear area of unprotected personnel and keep unprotected personnel upwind. Recover the free liquid with explosion proof pumps. Use an approved industrial vacuum cleaner for removal and place in suitable, dry and properly labelled waste containers. Wash area with water and detergent and absorb with further inert material. If the potential for fire exists, blanket the spill with foam as a precaution. If the product comes into contact with water, contain the contaminated water for later disposal. Prevent the material from spreading by damming in with an absorptive material. Do not flush the spilled material into the drains. If spill does enter waterways contact the local authority.
Disposal:	Waste Disposal: In accordance with local and national regulations. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Refer to the product label for instructions. Destroy empty containers by perforating and flattening before disposal by approved chemical waste disposal facility or at a licensed landfill site according to local regulations. If recycling, replace cap and take containers to the designated recycling point. Do NOT contaminate rivers by disposal. Opening burning or dumping of the empty container and its contents are prohibited.

Never re-use the empty container for any other purpose. Do not transport if this container is damaged or leaking.

7) Handling & Storage:

Handling:

Harmful if inhaled or swallowed and irritating to the eyes and skin. Avoid contact with eyes and skin and avoid inhalation of the spray and vapour.
Use with adequate ventilation.
Wash hands before eating, drinking, smoking, chewing gum, or using the toilet. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Keep away from food, drink and animal feeding stuffs.
Operators should change and wash clothing each day. Immediately remove clothing of this product gets inside. Thereafter, wash the skin thoroughly with a non-abrasive soap and water and put on clean clothing.
Do not apply directly to any areas where surface water is present, or to intertidal below the mean high water mark. Any water used to clean equipment must be disposed of correctly in order to avoid contamination.
Females of childbearing age should not come into contact with this product.

Storage:

Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight. Keep away from heat. Protect from temperatures above 40 °C. **Store away from foodstuffs. Keep out of reach of children.** Females of childbearing age should not come into contact with this product.

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

8) Exposure Control / Personal Protection:

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Component	Exposure limit(s)	Type of exposure limit
pirimicarb	1 mg/m ³ (TWA)	8 h TWA

PERSONAL PROTECTIVE EQUIPMENT:

Consult supplier to confirm that the equipment is suitable.

Clothing:

Body protection (chemical protection suit, boots) must be chosen based on the activity and possibility of exposure.

Gloves:	Suitable chemically resistant gloves (e.g. nitrile rubber (0.4 mm))
Eye protection:	Safety goggles with side – shields
Respiratory protection:	Wear a respirator with a particle filter with medium efficiency for solid and liquid particles if ventilation is inadequate.
Emergency eye wash:	Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9) Physical & Chemical Properties:

Form:	Water dispersible granule
Colour:	Beige
Odour:	Characteristic
Odour threshold:	Not determined
pH:	± 6.6
Melting point / Freezing point	89 °C
Initial boiling point and boiling range	No data available
Flash point:	Moderately flammable
Evaporation rate:	No data available
Flammability (solid, gas)	Not highly flammable
Upper/ lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility(ies)	Disperses in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature:	No data available
Viscosity:	No data available

10) Stability & Reactivity:

Reactivity:	No hazardous reactions known. Hazardous polymerisation does not occur. Combustion or thermal decomposition will evolve toxic and irritating vapours.
Chemical stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Avoid temperature extremes.
Hazardous decomposition product(s):	Combustion or thermal decomposition will evolve toxic and irritant vapours. Carbon monoxide, Carbon dioxide (CO ₂), Nitrogen Oxides (NO _x), Sulphur dioxides.
Conditions to avoid:	No decomposition if used as directed.
Incompatible materials:	None known.

11) Toxicological Information:

Acute:

Oral LD50 87.0 mg/kg, rat.
Dermal LD50 >2000mg/kg, rabbit
Inhalation LC50 (4h): 1.41 mg/L
Skin irritation : Moderate irritant.
Eye irritation : Mild irritant
Sensitisation : Not a sensitizer
Other :

Germ Cell Mutagenicity: The statement has been derived from the properties of the active ingredient. Tests revealed no mutagenic or genotoxic potential

Carcinogenicity: The statement has been derived from the properties of the active. Limited evidence of carcinogenicity in animal studies.

Reproductive Toxicity: The statement has been derived from the properties of the active. Tests revealed no effects on fertility. The statement has been derived from the properties of the active. Tests revealed no indication of developmental toxic effects at dosage rates that were not toxic to the parent animals.

STOT-SE: Pirimicarb: The substance or mixture is not classified as a specific target organ toxicant, single exposure.

STOT-RE: NA

Aspiration Hazard: NA

12) Ecological Information:

Information below based on active ingredient:

Bees: LD₅₀ (24 h) (oral) 4 µg/bee; (contact) 53 µg/bee

Birds: Acute oral LD₅₀ for poultry 25–50, mallard ducks 28.5, bobwhite quail 20.9 mg/kg

Fish : LC50 (96h): Pirimicarb: LC50 (96 h) for rainbow trout 79, bluegill sunfish 55, fathead minnows >100 mg/l

Algae : EC50 (96 h) for *Selenastrum* sp. 140 mg/l.

Worms: LC50 (14 d) >60 mg/kg.

Other aquatic species: *Daphnia magna*: EC₅₀ (48 h) 0.017 mg/l.

Persistence and degradability: In water: Degradation half-life: 36 – 55 d. Not persistent in water.
In soil: Degradation half-life: 29 – 365 d. Not persistent in soil.

Bioaccumulative potential: Pirimicarb: Does not bio accumulate. This substance is not considered to be persistent, Bioaccumulative or toxic (PBT). This substance is not considered to be very persistent and very Bioaccumulative (vPvB)

Mobility in Soil: Pirimicarb: Medium mobility in soil.

13) Disposal Considerations:

Waste Disposal: Do not contaminate ponds, waterways or ditches with any chemical or used container. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Refer to the product label for instructions.

Destroy empty containers by perforating and flattening before disposal by approved chemical waste disposal facility or at a licensed landfill site according to local regulations. If recycling, replace cap and take containers to the designated recycling point. Do NOT contaminate rivers by disposal. Opening burning or dumping of the empty container and its contents are prohibited.

Never re-use the empty container for any other purpose.
Do not transport if this container is damaged or leaking.

14) Transportation Information:

UN Number: 2757

Road transport ADR/RID

UN Proper Shipping name: CARBAMATE PESTICIDE, SOLID, TOXIC, N. O. S. (Pirimicarb)

Transport Hazard Class: 6.1

PACKAGING GROUP: III

Labelling no: 6.1

Environmental Hazards: Marine pollutant

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Air transport: ICAO / IATA

UN Proper Shipping name: CARBAMATE PESTICIDE, SOLID, TOXIC, N. O. S. (Pirimicarb)

Transport Hazard Class: 6.1

PACKAGING GROUP: III

Labelling no: 6.1

Environmental Hazards: Marine pollutant

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Maritime transport: IMDG

UN Proper Shipping name: CARBAMATE PESTICIDE, SOLID, TOXIC, N. O. S. (Pirimicarb)

Transport Hazard Class: 6.1

PACKAGING GROUP: III

Labelling no: 6.1

Environmental Hazards: Marine pollutant

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable

15) Regulatory Information:

Symbols: Xn – Harmful

Xi - Irritant

T: Toxic

Risk – Phrase:

R 20 - Harmful by inhalation.

R 25 - Toxic if swallowed.

R 36 - Irritating to eyes.

R43 - May cause sensitisation by skin contact.

R50/53 - Very toxic to aquatic organisms, may cause long – term adverse effects in the aquatic environment.

Safety – Phrase:

S1/2 - Keep locked up and out of reach of children.

S13 - Keep away from food, drink and animal feeding stuffs.

S20/21 - When using, do not eat drink or smoke.

S26 - In case of contact with eyes, rinse immediately with plenty of water.

S35 - This material and its container must be disposed of in a safe way.

S36/37/39 - Wear suitable protective clothing, gloves and eye / face protection.

S45 - In case of an accident or if you feel unwell, seek medical advice.

S61 - Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Hazard Statements

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H319 - Causes serious eye irritation.

H332 -Harmful if inhaled

H336 - May cause drowsiness or dizziness.

H371 - May cause damage to organs (not specified)

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Supplemental Information:

EUH401 - To avoid risk to human health and the environment comply with the instructions for use.

EUH208 - Contains Pirimicarb. May produce an allergic reaction.

Other Hazards: May form flammable dust-air mixture.

This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds.

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

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Abbreviations and acronyms:

1. CAS number: Chemical Abstracts Service number.
2. CLP: Classification, Labelling, Packaging.
3. LD50: Lethal Dose for 50% of the test population.
4. LC50: Lethal Concentration for 50% of the test population.
5. DT50: Half-life
6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals).
7. STOT: Specific Target Organ Toxicity.
8. SE: Single Exposure.

Literature References:

- GHS: www.ccohs.ca/oshanswers/chemicals/ghs.html
- ECHA: <https://echa.europa.eu/search-chemicals>