

Safety Data Sheet

according to WHS Regulations

Printing date 28.09.2020

Revision: 28.09.2020

1 Identification

Product Name: TIK BOS POUR-ON TICK DEVELOPMENT INHIBITOR

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Tick development inhibitor

Details of Manufacturer or Importer:

Nutrien Ag Solutions Limited
Level 5, Building A, 26 Talavera Road,
Macquarie Park NSW 2113

Phone Number: (02) 9889 5400

Emergency telephone number: 1800 44 88 92

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01).



health hazard

Toxic To Reproduction 1B H360 May damage fertility or the unborn child.



corrosion

Skin Corrosion/Irritation 1B H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Skin Sensitisation 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

Flammable Liquids 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H314 Causes severe skin burns and eye damage.

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H317 May cause an allergic skin reaction.
 H360 May damage fertility or the unborn child.
 H335 May cause respiratory irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe dusts or mists.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use to extinguish: CO₂, powder or water spray.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 872-50-4	N-methyl-2-pyrrolidone ⚠ Toxic To Reproduction 1B, H360; ⚠ Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335; Flammable Liquids 4, H227	30 - 60%
CAS: 2687-94-7	1-octyl-2-pyrrolidone ⚠ Skin Corrosion/Irritation 1B, H314; ⚠ Aquatic Chronic 2, H411	10 - 30%
CAS: 2687-96-9	1-dodecyl-2-pyrrolidone ⚠ Skin Corrosion/Irritation 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sensitisation 1, H317	10 - 30%

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4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap for 20 - 30 minutes. If irritation persists, repeat flushing. Seek medical attention.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for 20-30 minutes. Remove contact lenses, if present and easy to do. If irritation persists, repeat flushing. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation. May cause burns to respiratory system leading to pulmonary oedema.

Skin Contact: Causes severe skin burns and ulceration. May cause an allergic skin reaction, rash or inflammation.

Eye Contact: Causes serious eye damage and scarring to surrounding skin.

Ingestion: Causes moderate to severe burns and ulceration to the gastrointestinal tract.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog, foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen, other nitrogen compounds, hydrogen cyanide, water and smoke.

Combustible liquid.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate respiratory protection and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions: In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Wash area after spills.

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7 Handling and Storage

Precautions for Safe Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 872-50-4 N-methyl-2-pyrrolidone**

WES	STEL: 309 mg/m ³ , 75 ppm TWA: 103 mg/m ³ , 25 ppm Sk
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Engineering Controls:

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Impermeable gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Clear light yellow
Odour:	Ammoniacal
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available

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Initial Boiling Point/Boiling Range:	202 °C (at 100 kPa)
Flash Point:	92 °C
Flammability:	Combustible Liquid
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	Negligible at normal ambient temperatures
Relative Density:	1.04
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Insoluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 25 °C:	15 - 30 mPas

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Oxidising agents.

Hazardous Decomposition Products:

Oxides of carbon and nitrogen, other nitrogen compounds, hydrogen cyanide, water and smoke.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:		
CAS: 872-50-4 N-methyl-2-pyrrolidone		
Oral	LD50	3,914 mg/kg (rat)
Dermal	LD50	8,000 mg/kg (rabbit)
CAS: 2687-94-7 1-octyl-2-pyrrolidone		
Oral	LD50	2,050 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rab)

Acute Health Effects

Inhalation: May cause respiratory irritation. May cause burns to respiratory system leading to pulmonary oedema.

Skin: Causes severe skin burns and ulceration. May cause an allergic skin reaction, rash or inflammation.

Eye: Causes serious eye damage and scarring to surrounding skin.

Ingestion: Causes moderate to severe burns and ulceration to the gastrointestinal tract.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

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Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** May damage fertility or the unborn child.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**
Based on classification principles, the classification criteria are not met.**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No data associated with long term health effects.**Existing Conditions Aggravated by Exposure:** No data available.**Additional toxicological information:** No further relevant information available.

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

Very Toxic to aquatic life with long lasting effects.

CAS: 872-50-4 N-methyl-2-pyrrolidone

EC50/24 h	>1,000 mg/l (daphnia)
EC50/72 h	>500 mg/l (green algae)
LC50/96 h	1,072 mg/l (fathead minnow)
	>5,000 mg/l (rainbow trout)

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number**ADG****IMDG, IATA**

Not regulated.

UN3082

Proper Shipping Name**ADG**

Not regulated

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IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-dodecyl-2-pyrrolidone, 1-octyl-2-pyrrolidone), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-dodecyl-2-pyrrolidone, 1-octyl-2-pyrrolidone)
Dangerous Goods Class	
ADG Class:	Not regulated
IMDG Class:	9 Miscellaneous dangerous substances and articles.
Packing Group:	
ADG	Not regulated
IMDG, IATA	III
Marine pollutant:	
	Yes
	Symbol (fish and tree)
EMS Number:	
	F-A,S-F
Hazchem Code:	
	•3Z
Special Provisions:	
	274, 331, 335, 375, AU01
Limited Quantities:	
	5L
Packagings & IBCs - Packing Instruction:	
	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions:	
	PP1
Portable Tanks & Bulk Containers - Instructions:	
	T4
Portable Tanks & Bulk Containers - Special Provisions:	
	TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 872-50-4	N-methyl-2-pyrrolidone
CAS: 2687-94-7	1-octyl-2-pyrrolidone
CAS: 2687-96-9	1-dodecyl-2-pyrrolidone

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 28.09.2020**Prepared by:** MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

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IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Toxic To Reproduction 1B: Reproductive toxicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Data altered compared to the previous version:

Section 1: Details of Manufacturer or Importer.

Section 1: Phone Number.

Section 1: Emergency telephone Number.

Section 2: Hazardous Nature.

Section 4: Symptoms Caused by Exposure.

Section 5: Special Hazards Arising from the Chemical.

Section 7: Precautions for Safe Handling.

Section 11: Toxicity.

Section 11: Reproductive Toxicity.

Section 12: Aquatic Toxicity.

Section 14: Special Provisions.

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - May 2018”

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