SAFETY DATA SHEET

BIXLOZONE TECHNICAL

Version	Revision Date:	SDS Number:	Date of last issue: -
1.4	02.05.2023	50000290	Date of first issue: 13.09.2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BIXLOZONE TECHNICAL

Other means of identification : ISOFLEX ACTIVE

Recommended use of the chemical and restrictions on use

Recommended use : To be used as an active ingredient in herbicides only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Australasia Pty Ltd

Address : Building B, Level 2, 12 Julius Avenue,
North Ryde NSW 2113
Australia

Telephone : +6161029887900

Telefax : +61610298870911

E-mail address : SDS-Info@fmc.com

Emergency telephone number : For leak, fire, spill or accident emergencies, call:
1800 033 111 (Ixom)

Medical emergency:
1 800 033 111 (Transport and 24 h Medical information)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

Other hazards which do not result in classification

Very toxic to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name	:	2-(2,4-DICHLOROBENZYL)-4,4-DIMETHYLISOXAZOLIDIN-3-ONE
CAS-No.	:	81777-95-9

Components

Chemical name	CAS-No.	Concentration (% w/w)
Bixlozone	81777-95-9	>= 90 -<= 100

SECTION 4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Do not leave the victim unattended. Never give anything by mouth to an unconscious person. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	If inhaled, remove to fresh air. Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	:	Wash off with soap and water. Wash contaminated clothing before re-use.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Never give anything by mouth to an unconscious person. Do not give milk or alcoholic beverages. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	None known.
Notes to physician	:	Treat symptomatically. There is no specific antidote available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray, fog, or regular foam.
Unsuitable extinguishing	:	Do not spread spilled material with high-pressure water

media		streams.
Specific hazards during fire-fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Thermal decomposition can lead to release of irritating gases and vapours. Halogenated compounds Nitrogen oxides (NOx) Carbon oxides
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.
Hazchem Code	:	2Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid dust formation. Pick up and arrange disposal without creating dust. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene. For disposal considerations see section 13.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Pick up and transfer to properly labeled containers without creating dust. Keep in suitable, closed containers for disposal. Never return spills in original containers for re-use. Clean contaminated surface thoroughly.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Provide appropriate exhaust ventilation at places where dust is formed.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Hygiene measures	:	Avoid contact with skin, eyes and clothing. When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. Store at room temperature in the original container.
Recommended storage temperature	:	> 15 °C < 25 °C
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type	:	Particulates type
Hand protection Material	:	Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions. Ensure that eye flushing systems and safety showers are located close to the working place. Wear suitable protective equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Crystalline powder
Colour	:	white
Odour	:	odourless
pH	:	5.86 (20 °C) Method: OCSPP 830.7000
Melting point/range	:	81.5 - 83.5 °C
Boiling point/boiling range	:	Decomposition: Decomposes below the boiling point.
Flammability (solid, gas)	:	Will not burn
Self-ignition	:	382 °C Method: EEC A.15
Vapour pressure	:	0.0023 Pa (25 °C) Method: OECD Test Guideline 104
Density	:	1.37 g/l Method: OECD Test Guideline 109
Solubility(ies)		
Water solubility	:	39.5 mg/l pH: 7 Method: OECD Test Guideline 105
Solubility in other solvents	:	14 g/lSolvent: n-heptane > 250 g/lSolvent: Toluene > 250 g/lSolvent: dichloromethane > 250 g/lSolvent: Acetone 120 g/lSolvent: Methanol > 250 g/lSolvent: ethyl acetate 52 g/lSolvent: n-Octanol
Partition coefficient: n-octanol/water	:	log Pow: 3.3 pH: 7 Method: OECD Test Guideline 107
Decomposition temperature	:	151 °C
Explosive properties	:	Not explosive

Oxidizing properties	:	Non-oxidizing
Surface tension	:	66.5 mN/m, OECD Test Guideline 115
Molecular weight	:	274.15 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Avoid dust formation.
Incompatible materials	:	Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Thermal decomposition can lead to release of irritating gases and vapours. Halogenated compounds Nitrogen oxides (NOx) Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Components:

Bixlozone:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	LC50 (Rat): > 2.11 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Highest attainable concentration.
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Components:

Bixlozone:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Remarks	:	Minimal effects that do not meet the threshold for classification.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Bixlozone:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Minimal effects that do not meet the threshold for classification.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Bixlozone:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitisation.

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity - Assessment	:	Animal testing did not show any mutagenic effects.

Components:

Bixlozone:

Germ cell mutagenicity - Assessment	:	Animal testing did not show any mutagenic effects.

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Components:

Bixlozone:

Species	:	Mouse
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	126 mg/kg bw/day
Result	:	negative
Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - Assessment	:	Animal testing showed no reproductive toxicity.

Components:

Bixlozone:

Effects on fertility	:	Test Type: Two-generation study Species: Rat General Toxicity - Parent: NOAEL: 238 mg/kg bw/day General Toxicity F2: NOAEL: 59 mg/kg bw/day Result: negative
Effects on foetal development	:	Test Type: Embryo-foetal development Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 75 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 550 mg/kg bw/day Result: negative
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Bixlozone:

Species	:	Rat
NOAEL	:	121 mg/kg bw/day
Application Route	:	Oral - feed
Exposure time	:	90 days

Species	:	Rat
NOAEL	:	359 mg/kg bw/day
Application Route	:	Oral - feed
Exposure time	:	28 days

Aspiration toxicity

Not classified based on available information.

Product:

The substance does not have properties associated with aspiration hazard potential.

Components:

Bixlozone:

The substance does not have properties associated with aspiration hazard potential.

Neurological effects

Components:

Bixlozone:

No neurotoxicity observed in animal studies

Further information

Product:

Remarks	:	No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Bixlozone:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 9.8 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other	:	EC50 (Thamnocephalus platyurus): 0.11 mg/l

aquatic invertebrates		Exposure time: 48 h Method: OECD Test Guideline 202 EC50 (Daphnia magna (Water flea)): > 2.6 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC10 (Myriophyllum spicatum): 0.0071 mg/l Exposure time: 14 d Method: OECD Test Guideline 201 EC50 (Skeletonema costatum (marine diatom)): 0.76 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201 EC10 (Skeletonema costatum (marine diatom)): 0.24 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 0.38 mg/l Exposure time: 32 d Test Type: Early Life-Stage Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Americamysis bahia (mysid shrimp)): 0.12 mg/l Exposure time: 28 d Test Type: Reproduction Test Method: OPPTS 850.1350
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): 156 mg/kg
Toxicity to terrestrial organisms	:	LC50 (Anas platyrhynchos (Mallard duck)): > 5,000 mg/kg Method: OECD Test Guideline 205 LD50 (Apis mellifera (bees)): > 100 µg/bee End point: Acute contact toxicity Method: OECD Test Guideline 214 LD50 (Apis mellifera (bees)): > 100 µg/bee End point: Acute oral toxicity Method: OECD Test Guideline 213 LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg Exposure time: 14 d Method: OPPTS 850.2100

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Bixlozone:

Biodegradability	:	Result: Not readily biodegradable.
Stability in water	:	Hydrolysis: < 5 % at 25 °C(30 d) Method: OECD Test Guideline 111 Remarks: Does not readily hydrolyze
Photodegradation	:	Method: OECD Test Guideline 316 Remarks: Decomposes slowly in contact with light.

Bioaccumulative potential

Components:

Bixlozone:

Bioaccumulation	:	Bioconcentration factor (BCF): 49 Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 3.3 (22 °C) pH: 7 Method: OECD Test Guideline 107

Mobility in soil

Components:

Bixlozone:

Distribution among environmental compartments	:	Remarks: Moderately mobile in soil

Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Rinse empty containers with water and use the rinse-water to

prepare the working solution.
Triple rinse containers.
Packaging that is not properly emptied must be disposed of as the unused product.
Puncture container to avoid re-use.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bixlozone)
Class	:	9
Subsidiary risk	:	ENVIRONM.
Packing group	:	III
Labels	:	9 (ENVIRONM.)

IATA-DGR

UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (Bixlozone)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	956
Packing instruction (passenger aircraft)	:	956
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bixlozone)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes
Remarks	:	Environmentally hazardous substances/Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 kg or less for solids, or having a net quantity per single or inner packaging of 5 L or less for liquids may be transported as non-dangerous goods as provided in special provision A197 of the IATA and section 2.10.2.7 of IMDG code.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

ADG

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bixlozone)
Class	:	9
Packing group	:	III
Labels	:	9
Hazchem Code	:	2Z
Remarks	:	Environmentally hazardous substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the ADG Code when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg / liters, or IBCs

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Standard for the Uniform Scheduling of Medicines and Poisons	:	No poison schedule number allocated

APVMA Code: 90152

Prohibition/Licensing Requirements	:	There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

The components of this product are reported in the following inventories:

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.

		Bixlozone
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date	:	02.05.2023
Date format	:	dd.mm.yyyy

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recom-

mendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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