

SAFETY DATA SHEET

Section 1 – IDENTIFICATION OF PRODUCT AND COMPANY

Trade Name:	SHORTstop® 200SC Turf Growth Regulator
Product Use:	Plant growth regulator for use as described on the product label.
Company	Living Turf NZ
Details:	38 Hannigan Dr Mt Wellington, Auckland
Telephone	0800 428 268
Email:	servicenz@livingturf.com
Date of Issue:	September 10 2021
Emergency Telephone	CHEMCALL (0800 243 622) (24 hours)
National Poison Centre	0800 POISON (0800 764 766) (24 hours)

Section 2 – HAZARDS IDENTIFICATION

HSNO Classifications: 6.1D(acute oral toxicant), 6.3B(skin irritant), 6.4A(eye irritant), 6.8B(reproductive/development toxicant), 6.9B(target organ systemic toxicant), 9.3C(terrestrial vertebrate toxicant)

Hazards: Harmful-may be harmful if swallowed, inhaled or absorbed through the skin. May cause skin and eye irritation. May cause reproductive/development damage from repeated oral exposure. May cause organ damage from repeated oral exposure at high doses.
Harmful to terrestrial vertebrates.

Section 3 – COMPOSITION & INFORMATION ON INGREDIENTS

Ingredients	CAS No	Conc.%	
Paclobutrazol	76738-62-0	20	I
Inert Ingredients		80	

Section 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.
Skin contact	If spilt on the skin, remove contaminated clothing and wash affected areas of skin immediately. Wash contaminated clothing before reuse.
Eye contact	If concentrate is splashed in eyes, flush with running water for at least 15 minutes. Take to hospital without delay. For advice contact the National Poisons Centre 0800 POISON (0800 764766)
Ingestion	If swallowed, do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764766) or call a doctor.
Advice to Doctor	No specific requirements. Treat symptomatically.

Section 5 – FIRE FIGHTING MEASURES

Flammable Properties	Non flammable
Fire/Explosion Hazard	NA
Extinguishing Media	Water spray, foam, dry chemical, CO ₂ , Halon
Fire Fighting Instructions	<p>Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment Shut off source of fuel, if possible and without risk. Use water spray. Cool tank/container with water spray. Fight fire from maximum distance, use extreme caution as heat may decompose material and rupture containers.</p> <p>If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated.</p>
Combustion products	Not known.
HAZCHEM Code	2X

Section 6 – ACCIDENTAL RELEASE MEASURES

Spill precautions	Use appropriate Personal Protective Equipment during clean up.(See section 8)
Spill containment	Dyke spill. Prevent liquid from entering sewers, waterways on low areas.
Spill clean up	Soak up with sawdust, sand or other absorbent material. Shovel or sweep up. Never return to container for reuse. DO NOT flush to surface water or sanitary sewer system. (See section 13 for disposal recommendations.)

Section 7 – HANDLING AND STORAGE

Handling	Avoid skin and eye contact. Avoid inhaling the vapour, or spray mist. Wash thoroughly after handling. Wash clothing after use.
Storage	<p>Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight and under lock and key. Keep from contact with fertilisers, fungicides and seeds.</p> <p>Do not store with Classes 1,2,3,2,4 or 5 substances.</p>

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	Use only with adequate ventilation.
Exposure Standards	None established for formulated product.
Personal Protection	Use eye protection and rubber or neoprene gloves during mixing and spraying. Wear long sleeved shirt and long pants.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour:	Opaque off-white semi viscous liquid.
Odour:	Mild, characteristic odour.
Boiling Point:	Approximately 100°C at 100kPa.
Freezing/Melting Point:	Approximately 0°C
Vapour Pressure:	2.37 kPa at 20°C (water vapour pressure) (paclobutrazol)
Specific Gravity:	1.02 approx
Water Solubility:	Disperses
pH:	1% 6.5-8.5
Corrosivity:	Non corrosive
Oxidisation:	Not an oxidiser.

Section 10 – STABILITY AND REACTIVITY

Stability	Stable at normal temperatures and storage conditions.
Incompatible materials	No incompatibilities reasonably foreseeable.
Decomposition	Avoid freezing
Polymerisation	Polymerisation will not occur.

Section 11 – TOXICOLOGICAL INFORMATION

Inhalation

Short Term Exposure: Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: Exposure via eyes is considered to be unlikely. This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. This product is unlikely to cause any irritation problems in the short or long term.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Toxicity Data:

Paclobutrazol: LD₅₀ Oral, Rat 1,300-2000mg/kg LD₅₀ Oral, Mouse = 490-1,200mg/kg

LD₅₀ Oral, Guinea Pig = 400-600mg/kg

LD₅₀ Oral, Rabbit = 840-940mg/kg

LD₅₀ Dermal, Rabbit = >1,000mg/kg

LC₅₀ Inhalation, Rat = 3.13-4.79mg/L/4hr

Section 12 – ECOLOGICAL INFORMATION**Paclobutrazol**

Birds: LD₅₀ mallard duck >7,900mg/kg

Fish: LC₅₀ (96hr) rainbow trout: 27.8mg/L, NOEC 3.3 mg/L

Algae: EC₅₀ 180µmol/L

Daphnia: EC₅₀ (48hr) 33.2mg/L

Bees: LD₅₀ >0.002µg/bee (oral)

Soil: DT₅₀ 0.5-1.0y in general. Kow log P = 3.2. Koc 400. Moderately mobile in soil

Section 13 – DISPOSAL CONSIDERATIONS

Triple rinse empty container and add to spray tank. Puncture container and dispose of at an approved landfill. Dispose of this product only by using in accordance with label directions. Dispose of solid contaminated material/or contaminated soil in an approved landfill. Disposal must be in accordance with applicable local regulations.

Section 14 – TRANSPORT INFORMATION

Not classified as Dangerous Goods.

Section 15 – REGULATORY INFORMATION

HSNO Approval No.

HSR 05087

Section 16 – OTHER INFORMATION**GLOSSARY**

ACGIH

American Conference of Governmental Industrial Hygienists.

DT50

Time(days) for 50%loss.

EC50

Median effective concentration.

EEL	Environmental Exposure Limit.
ERMA	Environmental Risk Management Authority
HSNO	Hazardous Substances and New Organisms.
IARC	International Agency for Research on Cancer
Koc	Organic carbon partition coefficient (ml soil water/g organic carbon)
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
NOEL	No observable effect level.
OSHA	American Occupational Safety and Health Administration.
Pow	The octanol-water partition coefficient is the ratio of the concentration of a chemical in octanol and in water at equilibrium at a specified temperature.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
WES	Workplace Exposure Limit

Miscellaneous

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process

Responsibility for MSDS

Living Turf NZ

For further information Ph 0800 428 268