Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Tribute® Selective Turf Herbicide

Product code (UVP) 79644205, 86252163

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd

ABN 87 000 226 022 Level 1, 8 Redfern Road 3123 Hawthorn East

Victoria Australia

Telephone (03) 9248 6888 **Telefax** (03) 9248 6800

Responsible Department 1800 804 479 Technical Information Service **Website** www.environmentalscience.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Aspiration hazard: Category 1

H304 May be fatal if swallowed and enters airways.

Skin irritation: Category 2

H315 Causes skin irritation.

Skin sensitisation: Category 1

H317 May cause an allergic skin reaction.

Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to specific Australian legislation

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

Foramsulfuron

Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

Signal word: Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing mist.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves.

P272 Contaminated work clothing should not be allowed out of the workplace.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.

P331 Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.

P362 Take off contaminated clothing and wash before reuse.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Foramsulfuron 22.5 g/L Oil dispersion (OD)

Chemical name	CAS-No.	Concentration [%]	
Foramsulfuron	173159-57-4	2.34	
Solvent Naphtha (petroleum), heavy	64742-94-5	> 25.00	
aromatic, <1% naphthalene			
Calcium dodecylbenzenesulfonate,	70528-83-5	> 1.00 - < 5.00	
branched			
1-Octanol	111-87-5	> 1.00 - < 5.00	
Other ingredients (non-hazardous) to 100%			

SECTION 4. FIRST AID MEASURES

Tribute® Selective Turf Herbicide

Version 2/AUS Revision Date: 16.07.2018 102000022418 Print Date: 16.07.2018

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

4.1 Description of first aid measures

General advice Move out of dangerous area. Place and transport victim in stable

> position (lying sideways). Remove contaminated clothing immediately and dispose of safely. Keep under medical supervision for at least 48

hours.

Inhalation Move to fresh air. Keep patient warm and at rest. Call a physician or

poison control center immediately.

Skin contact Wash off thoroughly with plenty of soap and water, if available with

polyethyleneglycol 400, subsequently rinse with water. If symptoms

persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at

> least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation

develops and persists.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a physician or poison

control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Treat symptomatically. In case of ingestion gastric lavage should be

considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium

sulphate is always advisable. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Water spray, Carbon dioxide (CO2), Foam, Sand

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or

mixture

In the event of fire the following may be released:, Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen cyanide (hydrocyanic acid), Nitrogen oxides (NOx), Sulphur dioxide (SO2), Dangerous gases are

evolved in the event of a fire.

5.3 Advice for firefighters

Special protective equipment for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Remove product from areas of fire, or otherwise cool containers with

> water in order to avoid pressure being built up due to heat. Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting

to enter drains or water courses.

Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use

personal protective equipment.

6.2 Environmental

precautions

Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective

authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in

suitable, closed containers for disposal.

6.4 Reference to other

sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes

separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly

before using again. Garments that cannot be cleaned must be

destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Protect from

freezing.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Foramsulfuron	173159-57-4	10 mg/m3		OES BCS*
		(TWA)		

^{*}OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

8.2 Exposure controls

Respiratory protection Respiratory protection is not required under anticipated

circumstances of exposure.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's

instructions regarding wearing and maintenance.

Hand protection Please observe the instructions regarding permeability and

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the

contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be

removed.

Material Nitrile rubber
Rate of permeability > 480 min
Glove thickness > 4 mm
Protective index Class 6

Directive Protective gloves complying with EN

374.

Eye protection Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection Wear standard coveralls and Category 3 Type 6 suit.

If there is a risk of significant exposure, consider a higher protective

type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and

should be professionally laundered frequently.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully

remove and dispose of as advised by manufacturer.

and/or leaflet. In all other cases the above mentioned

recommendations would apply.

Engineering Controls

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Liquid
Colour beige
Odour aromatic

pH 5.0 - 7.0 at 10 % (23 °C) (deionized water)

Tribute® Selective Turf Herbicide

Version 2/AUS Revision Date: 16.07.2018 102000022418 Print Date: 16.07.2018

Flash point 128 °C

Density ca. 0.96 g/cm3 at 20 °C

Water solubility dispersible

Partition coefficient: n-

octanol/water

Foramsulfuron: log Pow: 0.60

9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition No data available

10.2 Chemical stability Stable under normal conditions.

No hazardous reactions when stored and handled according to 10.3 Possibility of

hazardous reactions prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

110.5 Incompatible materials Strong acids, Strong bases

10.6 Hazardous Thermal decomposition can lead to release of:

decomposition products Hydrogen chloride (HCI)

Hydrogen cyanide (hydrocyanic acid)

Carbon monoxide Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Mouse) > 2,000 mg/kg

Acute inhalation toxicity LC50 (Rat) > 5,250 mg/l**Acute dermal toxicity** LD50 (Rat) > 2,000 mg/kg Skin corrosion/irritation Irritating to skin. (Rabbit) Serious eye damage/eye

irritation

No eye irritation (Rabbit)

Respiratory or skin Sensitising (Mouse)

sensitisation OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment mutagenicity

Foramsulfuron was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Foramsulfuron was not carcinogenic in lifetime feeding studies in rats and mice.

Tribute® Selective Turf Herbicide

Version 2 / AUS

102000022418

Revision Date: 16.07.2018

Print Date: 16.07.2018

Assessment toxicity to reproduction

Foramsulfuron did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Foramsulfuron did not cause developmental toxicity in rats and rabbits.

Assessment STOT Specific target organ toxicity - single exposure

Foramsulfuron: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity - repeated exposure

Foramsulfuron did not cause specific target organ toxicity in experimental animal studies.

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Avoid inhalation of vapour or mist.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals., May cause skin irritation., Avoid contact with skin and clothing.

May cause eye irritation., Avoid contact with eyes.

May be harmful if swallowed., Do not take internally.

Early onset symptoms related to exposure

Refer to Section 4

Delayed health effects from exposure

Refer to Section 11

Exposure levels and health effects

Refer to Section 4

Interactive effects

Not known

When specific chemical data is not available

Not applicable

Mixture of chemicals

Refer to Section 2.1

Further information

The toxicological data refer to a similar formulation.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Lepomis macrochirus (Bluegill sunfish)) 7.8 mg/l

Exposure time: 96 h

Toxicity to aquatic

EC50 (Daphnia magna (Water flea)) 6.9 mg/l

invertebrates Exposure time: 48 h

Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) > 5 mg/l

Growth rate; Exposure time: 96 h

EC50 (Lemna gibba (gibbous duckweed)) 0.75 µg/l

Growth rate; Exposure time: 7 d

12.2 Persistence and degradability

Biodegradability Foramsulfuron:

Not rapidly biodegradable

Koc Foramsulfuron: Koc: 38 - 151

12.3 Bioaccumulative potential

Bioaccumulation Foramsulfuron:

Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Foramsulfuron: Mobile in soils

12.5 Other adverse effects

Additional ecological The ecological data refer to a similar formulation.

information No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

Triple-rinse containers before disposal. Add rinsings 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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ALKYL (C3-C6) BENZENE SOLUTION)

Hazchem Code •3Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG

UN number **3082** Transport hazard class(es) 9

Tribute® Selective Turf Herbicide

 Version 2 / AUS
 Revision Date: 16.07.2018

 102000022418
 Print Date: 16.07.2018

Subsidiary Risk None
Packaging group III
Marine pollutant YES

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ALKYL (C3-C6) BENZENE SOLUTION)

IATA

UN number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Environm. Hazardous Mark YES

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ALKYL (C3-C6) BENZENE SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994 Australian Pesticides and Veterinary Medicines Authority approval number: 63240

SUSMP classification (Poison Schedule)

Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Tribute® is a Registered Trademark of the Bayer Group.

Abbreviations and acronyms

ADN European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE Acute toxicity estimate

AU OEL Australia. OELs. (Adopted National Exposure Standards for Atmospheric

Contaminants in the Occupational Environment)

CAS-Nr. Chemical Abstracts Service number

CEILING Ceiling Limit Value Conc. Concentration

EC-No. European community number ECx Effective concentration to x %

EINECS European inventory of existing commercial substances

ELINCS European list of notified chemical substances

EN European Standard EU European Union

IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk (IBC Code)

ICx Inhibition concentration to x %

Tribute® Selective Turf Herbicide

Version 2 / AUS Revision Date: 16.07.2018
102000022418 Print Date: 16.07.2018

IMDG International Maritime Dangerous Goods

LCx Lethal concentration to x %

LDx Lethal dose to x %

LOEC/LOEL Lowest observed effect concentration/level

MARPOL: International Convention for the prevention of marine pollution from ships

N.O.S. Not otherwise specified

NOEC/NOEL No observed effect concentration/level

OECD Organization for Economic Co-operation and Development

OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure

Standard'

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration

of a particular substance determined over the shortest analytically practicable period of

time which does not exceed 15 minutes.

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

SK-SEN Skin sensitiser

SKIN_DES: Skin notation: Absorption through the skin may be a significant source of

exposure.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA

exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the

STEL.

TWA: Exposure standard - time-weighted average (TWA): The average airborne

concentration of a particular substance when calculated over a normal eight-hour

working day, for a five-day working week.

TWA Time weighted average

UN United Nations

WHO World health organisation

This SDS 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 SDS 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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.