FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office: 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07 Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: IMPOSTER 750 WP

Product Use: Herbicide
Creation Date: January 2012
Revision Date: March 2021

24 Hr Emergency Number: 082 771 2712

In case of poisoning:

Poison Information Centre: 082 446 8946 Tygerberg Hospital: (021) 931 6129 Poison Emergency Enquiries (021) 689 5227

In case of Spillage:

HAZMAT: 0800 147 112

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Metribuzin / Chlorimuron-ethyl

Chemical name: Metribuzin: 4-amino-6-tert-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5-one; 4-amino-6-

tert-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5(4H)-one [IUPAC]

Chlorimuron-ethyl: Ethyl 2-(4-chloro-6-methoxpyrimidin-2-ylcarbamoylsulfamoyl)benzoate

Chemical family: Triazine/Sulfonylurea

Use: Herbicide

Formulation: Chlorimuron-ethyl 107 g/kg + Metribuzin 643 g/kg

Wettable Powder

Hazardous ingredients of toxicological concern:

Inert:concern:% present:Chlorimuron-ethylHarmful64.3 % v/vMetribuzinHarmful10.7 % v/v

Symbol: Xn, Xi

Indication of Danger: Harmful, irritant

RISK-PHRASES R22; R50, R53

SECTION 3 - HAZARD IDENTIFICATION

Main hazard: May irritate eyes, nose, throat and skin. May be harmful if absorbed through skin.

Flammability: Not likely under stable conditions.

Chemical hazard:Group III.Biological hazard:NoneEye effects - eyes:Mild irritatingHealth effects - skin:Mild irritating.Health effects - ingestion:May be harmful

Health effects – inhalation: Slight irritating to throat.

Carcinogenicity: None Mutagenicity: None Neurotoxicity: None

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Product in eve:

Immediately flush with plenty of clean water for at least 15 minutes.

Product on skin:

Wash skin with soap and water immediately after contact. Wash contaminated clothing before re-use.

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa
Registration Number: 2005/011761/07
Tel + 27 31 003 3486 ● Fax + 27 31 502 5825

Product ingested:

If swallowed, immediately give at least 2 glasses of water and induce vomiting. Never give anything by mouth to unconscious person. Consult a physician.

Product inhaled:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media: Water spray, dry chemicals. **Special hazards:** Not a fire or explosion hazard.

Protective clothing:

Applicators and other handlers must wear: Long-sleeved shirt and long pants. Waterproof gloves. Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls, Waterproof gloves, Shoes plus socks, Exposure Guidelines. Applicable Exposure Limits

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. **Initial Containment:**Dike spill. Prevent material from entering sewers, waterways, or low areas.

Methods for cleaning up: Spill Cleanup: Shovel or sweep up.

Accidental Release: If spill area is on ground near valuable plants or trees remove top 2

Measures inches of soil after initial clean-up

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Rubber gloves face shield or mask. Avoid breathing vapours or mist. Avoid breathing dust. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. Wash hands before eating, drinking, chewing gum, using tobacco and using the toilet. Avoid dust generation.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational exposure limits:

METRIBUZIN

 PEL (OSHA)
 : None Established

 TLV (ACGIH)
 : 5 mg/m3, 8 Hr. TWA, A4

 AEL* (DuPont)
 : 5 mg/m3, 8 Hr. TWA

CHLORIMURON ETHYL:

PEL (OSHA) : None Established TLV (ACGIH) : None Established

AEL * (Du Pont) : 10 mg/m³, 8 & 12 Hr. TWA, total dust; 5 mg/m³, 8 & 12 Hr. TWA, respirable dust

[* AEL is recommended Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are, in effect, such limits shall take precedence.]

Engineering measures: Use only with adequate ventilation. Keep container tightly closed.

Personal protective equipment: Applicators and other handlers must wear: Long-sleeved shirt and long pants. Waterproof gloves. Shoes and socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Personal protection

Respiratory: Mouth respirator **Hands:** Waterproof Rubber glove

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office: 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07 Tel + 27 31 003 3486 • Fax + 27 31 502 5825

Eyes: Face shield or mask

Skin: Long-sleeved shirt and long pants. Shoes plus socks

Other protection: Non specified

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Beige powder, free of any lumps.

Odour:NonepH:6 - 8Boiling point:> 100°CMelting point:> 126 °CFlash point:N\A > 100°CFlammability:Not flammableSuspensibility:Min 90% after 30 min

Oxidizing properties: none
Specific gravity (g/cm³ at 20°C): 0.8 g/cm³
Solubility – water: 100%

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions

Incompatibility with Other Materials:None reasonably foreseeableDecomposition:Decomposition will not occur.Polymerization:Polymerization will not occur.Conditions to avoid:Extreme heat and fire

Hazardous decomposition products: Oxides of carbon and nitrogen may be given off when exposed to

extreme heat of fire.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral LD50 for rats: >2890 mg/kg (calculated)

Dermal LD50 for rats: >2000 mg/kg (calculated

Inhalation : >76 mg/kg (calculated)

Skin and every contact: Mild irritating

Skin and eye contact: Mild irritating.

Chronic toxicity:

No ill effects were observed in dogs fed dietary doses of 12.5 mg/kg/day for 3 months [33]. No effects were apparent in rats receiving 2.5 mg/kg/day over 3 months, but doses of 25 and 75 mg/kg/day caused enlarged livers and thyroid glands [33]. In 2-year feeding studies with rats and dogs, results showed no observable effects at doses of 5 mg/kg/day in rats and 2.5 mg/kg/day in dogs. Reduced weight gain, an increase in the number of deaths, blood chemistry changes, and liver and kidney damage were observed in a 2-year study in which dogs were given 1500 ppm or 37.5 mg/kg/day of metribuzin [34].

Reproductive:

Doses of 15, 45, or 135 mg/kg/day of technical metribuzin were administered by gavage to rabbits on days 6 through 18 of pregnancy. No effects on the mothers were observed at a dose of 45 mg/kg, but 135 mg/kg lowered maternal weight gain [35]. No effects on the fetuses were observed at any of the doses tested [35]. A three-generation study in rats at doses of up to 15 mg/kg/day (the highest dose tested), showed no influence on reproduction [32,36]. Metribuzin does not cause reproductive effects.

Carcinogenicity:

There were no indications of carcinogenic effects in rats receiving dietary doses of up to 15 mg/kg/day for 2 years, nor in mice fed up to about 380 mg/kg/day for 2 years [32]. These data suggest that metribuzin is not carcinogenic.

Mutagenicity:

Tests on live animals and on tissue cultures have shown that metribuzin has no mutagenic activity [15,32].

Teratogenicity:

In rats, reduced fetal body weights were seen at doses of 70 mg/kg/day, and developmental delays were observed at doses of 200 mg/kg/day [15]. Metribuzin did not show teratogenic activity in rabbits at doses of up to 85 mg/kg/day, but did decrease weight gain in offspring [15]. These data suggest that metribuzin is unlikely to cause teratogenic effects in humans under normal circumstances.

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICOLOGY:

<u>Data on Chlorimuron-ethyl:</u> **Aquatic toxicity – fish:**

 LC_{50} (96 h) for trout (96 h) > 1000

Bluegill sunfish > 100 mg/l

Aquatic toxicity - daphnia: > 1000 mg/l

Other aquatic toxicity

For Lemna gibba. EbC50 0.45 ppb

Worms: LC₅₀ for earthworms (Eisenia foetida) >4050 mg/kg

Bees: LD₅₀ (48 h) >12.5 μ g/bee

Data on Metribuzin

Aquatic toxicity - fish: Slightly toxic to sensitive species

LC₅₀ (96 h) for trout (96 h) 74,6

Golden orfe 141.6

Sheepshead minnow 85 mg/l

Highly toxic to aquatic invertebrates Aquatic toxicity – daphnia: > 49.6 mg/l

Aquatic toxicity - algae: ErC₅₀ for Scenedesmus subspicatus 0.021 mg/l

Worms: LC₅₀ for earthworms (*Eisenia foetida*) 331.8 mg/kg

Bees: Not toxic to bees

LD₅₀ 35 µg/bee

Biodegradability: by microbial hydrolysis and deamination in the soil

Bio-accumulation: None

Mobility: Mobile in soil with possibility to leach.

SECTION 13 - DISPOSAL CONSIDERATION

Disposal methods:

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Remove non-usable solid material and/or contaminated soil, for disposal in an approved and permitted landfill. Do not flush to surface water or sanitary sewer system. Do not contaminate rivers, dams or any other water source with chemical or used containers. Drain and triple rinse containers and then destroy by perforation and flattening. Bury in an approved dumping site.

Disposal packaging:

Do not re-use containers for any other purpose.

SECTION 14 - TRANSPORT INFORMATION

UN No.: 3077

ADR

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Metribuzin/chlorimuron-methyl)

Class:

Classification code: M7
Packaging group: III

Label: 9
Hazard ID no.: 90

IMDG

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Metribuzin/chlorimuron-methyl)

Class:

Label: 9 Marine Pollutant

Packing Group:

ICAO/IATA

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Metribuzin/chlorimuron-methyl)

Class: 9
Label: 9
Packing Group: III

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office: 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07 Tel + 27 31 003 3486 • Fax + 27 31 502 5825

Pack Instr. Passenger: 914

Pack Instr. Cargo: 914

Tremcard Nr. CEFIC: 90GM7-III
This product is considered a Marine Pollutant.

SECTION 15 - REGULATORY INFORMATION

Symbol: Xn, Xi

Indication of danger: Harmful, Irritant

Risk phrases:

R22 Harmful if swallowed

R50 Very toxic to aquatic organisms

R53 May cause long-term adverse effects in the aquatic environment

Safety phrases:

S2 Keep out of the reach of children S36 Wear suitable protective clothing

SECTION 16 - OTHER INFORMATION

Packaging:

Packed in 500g, 1, 5, 10, 15, 20 and 25 kg bags and labeled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.