

Material Safety Data Sheet

EMETRI 480 SC

1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

DATE

Trade name: Metribuzin 480 g/L SC **Usage:** Herbicide

Company: Agrow Allied Ventures Private Limited

C 1/9 DLF Phase-1, Gugaon-122002, Haryana, India.

2: HAZARDS IDENTIFICATION

Hazard pictogram(s):



Signal word: Warning.

Hazard statements

H302: Harmful if swallowed

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P330 Rinse mouth.

P391 Collect spillage. Hazardous to the aquatic environment

P501 Dispose of contents/container

Other hazards: Not available

3: COMPOSITION INFORMATION ON INGREDIENTS

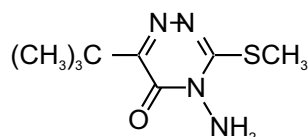
Common name: metribuzin (BSI, E-ISO, WSSA); metribuzine ((f) F-ISO)

Chemical name: 4-amino-6-(1, 1-dimethylethyl)-3-(methylthio)-1, 2, 4-triazin-5(4H)-one

Formula weight: 214.3

Molecular formula: C₈H₁₄N₄OS

Structure:



Mixtures

Name	CAS No.	Content, g/L
Metribuzin	21087-64-9	480.0

4: FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin contact: Flush skin with water after contact. Wash contaminated clothing before reuse.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, immediately give 2 glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.

5: FIRE AND EXPLOSION INFORMATION

Suitable extinguishing media: Water, Foam, Carbon dioxide (CO₂), and Sand

Hazards from combustion products: In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NO_x)

Precautions for fire-fighting: Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Do not allow run-off from fire-fighting to enter drains or water courses. Whenever possible, contain fire-fighting water by diking area with sand or earth.

6: ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with skin and eyes. Do not breathe in fumes.

For personal protection see Section 8.

Environmental precautions:

Do not allow to enter drains or water courses. When the product contaminates public waters, inform appropriate authorities in accordance with local regulations.

Small dry spills, sweep up with damp earth or sand or other suitable absorbent, such as sawdust, taking care not to raise a dust cloud. Place the material into a clean, dry container and cover for subsequent disposal.

Large spills; evacuate area. Wear appropriate protective clothing. Ventilate area, sweep up and place in an appropriate container. Wash contaminated surfaces to remove any residues.

In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep unnecessary people away.

7: HANDLING AND STORAGE

Handling: Harmful by inhalation, if swallowed and contact with eyes and skin. Avoid contact with eyes, prolonged contact with skin, and inhalation of dust. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the herbicide gets inside, then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Store in its original labeled container in shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Not to be stored next to foodstuffs and water supplies. Keep out of reach of children and animals. Local regulations should be complied with.

8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Use only with adequate ventilation.

Personal protective equipment: Always follow label instructions when handling this product.

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

9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white liquid **Odor:**

Characteristic odor

pH: 6.0 - 9.0

10: STABILITY AND REACTIVITY

Conditions to avoid: Exposure to moisture. Elevated temperatures

Materials to avoid: Strong bases, Ketones, Aldehydes, Oxidizing agents

Materials to avoid: Store only in the original container.

Hazardous decomposition products: Thermal decomposition can lead to release of: Hydrogen cyanide (hydrocyanic acid), Nitrogen oxides (NO_x), Carbon oxides, Sulphur oxides

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

11: TOXICOLOGICAL INFORMATION

For Metribuzin tech

Acute toxicity:

Oral: Acute oral LD₅₀ for male rats 510, female rats 322, mice c. 700, guinea pigs c. 250, cats >500 mg/kg.

Dermal: Acute percutaneous LD₅₀ for rats > 2000 mg/kg.

Inhalation: LC₅₀ (4h) for rats >0.65 mg/l air (dust).

Skin and eye: Not irritant to skin and eyes (rabbits).

Skin sensitization: Not a skin sensitizer.

NOEL: (2 y) for dogs 100 mg/kg diet (3.4 mg/kg b.w.), for rats 30 ppm (1.3 mg/kg b.w.. for males).

ADI: (EC) 0.013 mg/kg b.w. [2007]; (EPA) cRfD 0.013 mg/kg b.w. [1997].

12: ECOLOGICAL INFORMATION:

For Metribuzin tech:

Birds: Acute oral LD₅₀ for bobwhite quail 164, mallard ducks 460-680 mg/kg.

Fish: LC₅₀ (96 h) for rainbow trout 74.6, golden orfe 141.6, sheepshead minnows 85 mg/l.

Daphnia: LC₅₀ (48 h) 49.6 mg/l.

Algae: E_rC₅₀ for *Scenedesmus subspicatus* 0.021 mg/l.

Bees: Not toxic to bees; LD₅₀ 35 µg/bee.

Worms: LC₅₀ for *Eisenia foetida* 331.8 mg/kg dry soil.

Persistence and degradability

Biodegradability: Rapidly degraded in soil; DT₅₀ in soil c. 1-2 mo.

Bio-accumulative potential: Does not bioaccumulate.

Additional information: Avoid release to the environment.

13: DISPOSAL CONSIDERATIONS

Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be b u r n t .

14: TRANSPORT INFORMATION

UN number: 3082

UN proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S,
(Metribuzin)

Transport hazard class(es): 9

Packing group: III

Environmental hazards: Yes

Special precautions for user: Not available

15: REGULATORY INFORMATION

Risk phrases:

R 22 Harmful if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S2 Keep out of the reach of children.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

16: OTHER INFORMATION

The information contained in the safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.