

MATERIAL SAFETY DATA SHEET

Harris 240 EC (Oxyfluorfen 24% EC)

1. CHEMICAL PRODUCT IDENTIFICATION/PREPARATION OF THE COMPANY

Product Name Trade name Molecular Formula Molecular Weight Chemical Name Color Odor CAS No. Manufacturer Address Phone EAX	 : Oxyfluorfen 24 % EC : Harris 240 EC : C15H11O4NF3Cl : 361.70 : 2-Chrolo-α, α, α-trifluoro-p-totyl-3-ethoxy-4-nitrophenyl ethyl : yellow to brown amber liquid : Aremetic Odor : 42874-03-3 : ANGLO GULF LIMITED : P.O.Box.16887Jebel Ali Free Zone,DUBAI (U.A.E). : +971 4 883 5039 : +971 4 883 5853
FAX EMAIL Website	: +971 4 883 5853 : <u>agadxbme@emirates.net.ae</u> : <u>www.anglogulf.ae</u>

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Oxyfluorfen	42874-03-3	24.0
Other inert ingredients		76.0

3. Hazards Identification

Skin Non irritant. Eyes Mild irritant.

Inhalation May cause, after heavy exposure, hypersensitivity, ataxia, urinary incontinence. Ingestion May cause hypersensitivity, ataxia, urinary incontinence. Other information - Physical/chemical effects Flammable. Environmental effects Toxic to aquatic organisms.

4. First Aid Measures

If swallowed: call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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If in eyes: hold eye open and rinse slowly and gently with water for 15-20minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If inhaled: move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

5. Fire-Fighting Measures

Extinguishing media Foam, dry chemical, water spray

Hazards from combustion products

In a fire, irritant and toxic fumes containing oxides of carbon and sulphur, and hydrogen

chloride may be generated.

Precautions for fire fighters

The product is a Class C1 Combustible liquid.

Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away and move all other personnel to windward side of fire. Consider evacuation, taking all relevant factors into account. In case of doubt, evacuate immediate vicinity and request emergency services assistance. Use water spray to cool fire-exposed containers. Avoid spraying directly into containers due to danger of boil over. Bund area with sand or earth to prevent contamination of drains or waterways.

Dispose of fire control water or other extinguishing agent and spillage safely later.

6. Accidental Release Measures

Precautions to be taken in handling and storing: Store in a cool, well-ventilated, area, Keep away from ignition sources, heat and flame.

Store in a tightly closed container.

Other precautions: Do not take internally.

Handle with due care. Avoid unnecessary contact.

7. Handling and Storage

Handling

Keep out of reach of children. Very dangerous. Poisonous if absorbed by skin contact, inhaled or swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. If product or spray in eyes, wash it out immediately with water. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (if rubber, wash with detergent and warm water) and contaminated clothing.

Storage

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Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Keep away from all ignition sources. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilizers.

8. Exposure Controls/Personal Protection

Respiratory protection	: Wear impervious protects clothing.
Ventilation	: Filtering gas mask.
Protective gloves	: Rubber gloves.
Eye protective	: Chemicals safety goggles.
Other protective equipment	: waterproof boots, long-sleeved shirt, long pants and hat

9. Physical and Chemical Properties

Appearance and	: slight yellow powder
Odor	: Aromatic odour
Solubility	:0.1 mg/L@ 25oC in water
Specific gravity (water=1)	: 0.990 (+/- 0.05) at 20°C
Bulk density	: 1.35 (Oxyflourfen)
Vapour pressure	: 0.0267 mPa @ 25oC
Boiling point	: Not applicable
PH	: 6.0-9.0

10. Stability and Reactivity

Incompatibility (Materials to avoid): Oxidants and food.		
Hazardous decomposition products: Burning may yield carbon monoxide, carbon dioxide, nitrogen		
de.		

11. Toxicological Information

Acute toxicity: Oxyfluorfen is practically nontoxic by ingestion, with reported oral LD50 values of 5000 mg/kg in both rats and dogs, and 2700 to 5000 mg/kg in mice.

The dermal LD50 is greater than 5000 mg/kg in both rats and rabbits, also indicating slight toxicity by this route. It causes no skin irritation in rabbits, no skin sensitization in guinea pigs, and moderate eye irritation in rabbits. However, Goal and other formulations may show severe skin and eye irritant properties, and may be skin sensitizers.

The 4-hour inhalation LC50 for the technical product is not available, but that for Goal 1.6E is greater than 22.64 mg/L, indicating practically no toxicity via this route.

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12. Ecological And Ecotoxicological Information

Effects on birds: Oxyfluorfen is practically nontoxic to birds;

The reported oral LD50 values are greater than 2200 mg/kg in bobwhite quail, and greater than 4000 mg/kg in mallard duck. The dietary 8-day dietary LC50 values are greater than 5000 ppm in bobwhite quail, and 4000 ppm in mallard ducks. Dietary concentrations as high as 100 ppm had no effect on reproduction in mallards or bobwhite quail.

Effects on aquatic organisms: Oxyfluorfen is highly toxic to aquatic invertebrates, freshwater clams, oysters, aquatic plants, and fish.

The reported 96-hour LC50 values are 200 ug/L in bluegill sunfish, 410 ug/L in rainbow trout, 400 ug/L in channel catfish, 150 ug/L in fathead minnow, and 32 ug/L in grass shrimp and oysters. Its 96-hour LC50 in freshwater clams is 10 ug/L. The 96-hour LC50 for the product Goal 2E in Daphnia magna, a small freshwater crustacean, is 1500 ug/L. Oxyfluorfen accumulated up to 13 mg/kg (13,000 ug/kg) in bluegill sunfish exposed to 10 ug/L for 40 days.

This represents a bioconcentration factor (BCF) of 1300. The BCF in channel catfish was 700 to 5000 in one 30-day study. These results indicate a low to moderate potential for bioaccumulation in aquatic species.

Effects on other organisms: Oxyfluorfen is nontoxic to honeybees, with a reported oral LC50 of greater than 10,000 ppm.

13. Disposal Considerations

Steps to be taken in case material is released or spilled: Sweep up with spade, place into a dry, cleanlidded container for disposal.

Waste disposal method: Dispose of in accordance with local, state, and federal regulations. Do not put in climate-closed containers.

14. Transport Information

UN number	: 2903
Proper shipping name	: Pesticide, Liquid, Toxic, Flammable Nos
Class	:6.1
Subsidiary Risk	: N.A
Packing Group	: 111
Marine Pollutant (P, PP, No)	:P
Marine Pollutant (P, PP, NO)	٠r

15. Reactivity data

Not Applicable

16.Other Information

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All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

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