MSDS OF NAADCO S-METOLACHLOR 960 HERBICIDE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name **NAADCO S-METOLACHLOR 960 HERBICIDE**
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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS
Classified as hazardous sccording to the criteria of NOHSC
Not Classified as Dangerous Goods for Land Transport
Risk phrases
H319：Causes serious eye irritation.
H317：May cause an allergic skin reaction.
H332：Harmful if inhaled.
Safety phrases
P102： Keep out of reach of children.
P280： Wear protective gloves/ protective clothing/ eye protection/face protection.
P302 + P352： IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338： IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312： Call a POISON CENTRE or doctor/ physician if you feel unwell.
P363： Wash contaminated clothing before reuse.
P391： Collect spillage.
P501： Dispose of contents/ container to an approved waste disposal plant.
Hazard Symbols：

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
S-metolachlor	[87392-12-9]	960g/L
Mixture of aromatic hydrocarbons	[64742-94-5]	＜10g/L
Nonylphenol ethoxylate propoxylate	[37251-69-7]	＜10g/L

Nonylphenol polyglycolether sulfate and ethoxylated tallow alkly amines (surfactant mixture)	[9081-17-8] [61791-26-2]	＜10g/L
Other ingredients (including water) determined not to be hazardous		Balance

4. FIRST AID MEASURES

Consult the Poisons Information Centre (131126) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

FIRST AID

Swallowed: If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.Immediate medical attention is required.

Skin: Take off all contaminated clothing immediately.Wash off immediately with plenty of water.If skin irritation persists, call a physician.Wash contaminated clothing before re-use.

Inhaled: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.

Advice to Doctor: There is no specific antidote available. Treat symptomatically.DO NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.

5. FIRE FIGHTING MEASURES

FLAMMABLE LIMITS: LFL: Not available
UFL: Not available

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, and/or water fog.

FIRE AND EXPLOSION HAZARDS: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.

FIRE-FIGHTING EQUIPMENT: When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat goggles and self contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or water courses.Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR

SPILLS/LEAKS: Avoid eye and skin contact
Avoid contamination of waterways
Wear full length clothing and PVC gloves
Keep all bystanders away

Small spills/leaks: Keep all bystanders away. Wear full length clothing and PVC gloves. Absorb with material such as sand, soil or sawdust. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. Do not use water to clean up.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Precautions for Safe Handling: Keep out of reach of children. Harmful if swallowed, inhaled, or absorbed through skin. Causes eye and skin irritation. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Conditions for Safe Storage: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. Do not store with food, feedstuffs, fertilizers and seeds. See product label for further handling/storage precautions relative to the end use of this product. Reduce stacking height where local conditions can affect packaging strength.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINES: Fluroxypyr 1-methylheptyl ester: NAADCO Hygiene Guide is 10mg/m^3.

Engineering controls: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Personal protection:

EYE/FACE PROTECTION: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.

	Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: polyethylene, Viton, Polyvinyl chloride (PVC or vinyl), styrene/butadiene rubber, ethyl vinyl alcohol laminate (EVAL), butyl rubber, chlorinated polyethylene, Neoprene, natural rubber latex), nitrile/butadiene rubber (nitrile or NBR). Avoid gloves made of polyvinyl alcohol (PVA).
RESPIRATORY PROTECTION:	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: organic vapor cartridge with a particulate pre-filter.
APPLICATORS AND ALL OTHER HANDLERS:	Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow; emulsifies with water.
Physical state:	Liquid
Odour:	Aromatic
Boiling Point:	No data available.
Solubility in Water:	Emulsifies in water.
Specific Gravity:	~1.
Vapour Pressure:	135 x 10^{-3} mPa @ 20°C
Volatile Component:	No data available.
Flash Point:	> 67ºC.

10. STABILITY AND REACTIVITY

Chemical stability:	This product is stable under normal use and storage conditions.
Incompatible materials:	Avoid acids, oxidizing and base materials.
Hazardous decomposition products:	Under fire conditions, oxides of nitrogen, hydrogen chloride, and hydrogen fluoride may be produced.
Hazardous decomposition products:	Not known to occur.

11. TOXICOLOGICAL INFORMATION

This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

Swallowed: Low toxicity if swallowed. The oral LD50 for rats is expected to be >2000 mg/kg. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Eye: May cause slight eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness

Skin: Brief contact is essentially non-irritating to skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The dermal LD50 for rabbits is expected to be >2000 mg/kg. Did not cause allergic skin reactions when tested in guinea pigs.

Inhaled: For the active ingredient, no adverse effects are anticipated from single exposure to vapor. The LC50 for rats is >6.2 mg/L for 4 hours. Excessive exposure may cause irritation to upper respiratory irritation tract (nose and throat). May cause central nervous system effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:

Excessive exposure to the solvent may cause respiratory irritation and central nervous system depression. Based on available data, repeated exposures to the active ingredient are not anticipated to cause significant adverse effects.

CANCER INFORMATION:Fluroxypyr did not cause cancer in laboratory animals. This material contains a minor component which has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in the minor components production. Limited oral studies in rats were negative.

TERATOLOGY (BIRTH DEFECTS):

Fluroxypyr has been toxic to the fetus in laboratory animals at doses toxic to the mother.

REPRODUCTIVE EFFECTS:

Fluroxypyr did not interfere with reproduction in laboratory animal studies.

MUTAGENICITY:

For fluroxypyr, in-vitro genetic toxicity studies were negative. For a minor component, in-vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

12. ECOLOGICAL AND ECOTOXICOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

MOVEMENT & PARTITIONING:

Based largely or completely on information for the active ingredient.

Bioconcentration potential is low (BCF is <100 or Log Pow <3). Potential for mobility in soil is slight (Koc is between 2000 and 5000).

DEGRADATION & PERSISTENCE:

Based largely or completely on information for the active ingredient.

Stability in water (1/2 life): 12.8 – 16.5 hours.

ECOTOXICOLOGY:
Based largely or completely on information for the active ingredient.
Material is very highly toxic to fish and aquatic
invertebrates on an acute basis (LC50 or EC50 <0.1 mg/L in most sensitive species).
Material is practically non-toxic to birds on an acute basis (LD50 >2000 mg/kg).
Material is practically non-toxic to birds on a dietary basis (LC50 >5000 ppm).

13. DISPOSAL CONSIDERATIONS

Disposal method: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulations. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT: This material is not regulated for transport by air.
AIR AND SEA TRANSPORT: Classified as dangerous goods for transport by air and sea.
UN No: 3082
Class: 9
Packing group: III
SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (fluroxypyr)

15. REGULATORY INFORMATION

Registered according to the Agricultural Chemicals Act, APVMA Approval Number 91523/132517

16. OTHER INFORMATION

Version 1.0
Revision Date: 2020.08.01

The information contained in this MSDS is provided in good faith and is believed to be correct and the date hereof. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in th eworksplace including in conjunction with otherproducts.
Please read all labels carefully before using product.