

Ethoxysulfuron

sc-227997

Material Safety Data Sheet



The Power is Question

Hazard Alert Code Key:

EXTREME

HIGH

MODERATE

LOW

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

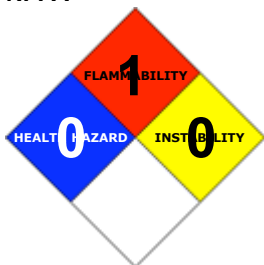
PRODUCT NAME

Ethoxysulfuron

STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

NFPA



SUPPLIER

Santa Cruz Biotechnology, Inc.
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800.457.3801 or 831.457.3800

EMERGENCY

ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255

(1-800-CHEMCALL) or call +613 9573 3112

SYNONYMS

C15-H18-N4-O7-S, "2-ethoxyphenyl [(4, 6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamate", "sulfamic acid, [[[4, 6-dimethoxy-2-pyrimidinyl]amino]carbonyl]-, 2-", "ethoxyphenyl ester", "1-(4, 6-dimethoxypyrimidin-2-yl)-3-(2-ethoxyphenoxy-sulfonyl)urea", "2-ethoxyphenyl[[[4, 6-dimethoxy-2-pyrimidinyl]amino]carbonyl]sulfamate", "AE F095404 (AgrEvo)", "Hoe 095404 (Hoechst)", "Hoe-404 (Hoechst)", "sulfonyleurea herbicide Hero"

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability:	1	
Toxicity:	0	
Body Contact:	0	
Reactivity:	1	
Chronic:	0	

Min/Nil=0
Low=1
Moderate=2
High=3
Extreme=4



CANADIAN WHMIS SYMBOLS

None

EMERGENCY OVERVIEW

RISK

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

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g.

EYE

■ Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.

SKIN

■ The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

INHALED

■ The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

■ Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

■ Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Sulfonylureas, imidazolinones, sulfonamides and triazolo-pyrimidines, as herbicides, are used extensively because of their wide-spectrum effects on weeds and their low toxicity to mammals. The effects of these herbicides on plants, micro-algae and bacteria are due to the inhibition of acetolactate synthase (ALS) involved in the synthesis of acetolactic and butyric acids, which are the precursors of the branched-chain amino acids: isoleucine, leucine and valine.

Mammals also produce these precursor amino-acids using ALS so the potential for toxic effects is apparent though not evident from many studies.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
ethoxysulfuron	126801-58-9	>98

Section 4 - FIRST AID MEASURES

SWALLOWED

· Immediately give a glass of water. · First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

EYE

■ If this product comes in contact with eyes: · Wash out immediately with water. · If irritation continues, seek medical attention.

SKIN

■ If skin or hair contact occurs: · Flush skin and hair with running water (and soap if available). · Seek medical attention in event of irritation.

INHALED

· If fumes or combustion products are inhaled remove from contaminated area. · Other measures are usually unnecessary.

NOTES TO PHYSICIAN

■ Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Vapor Pressure (mmHg):	49.504 x 10 ⁻⁸ (20 C)
Upper Explosive Limit (%):	Not Available
Specific Gravity (water=1):	1.48 g/cm ³ (20 C)
Lower Explosive Limit (%):	Not Available

EXTINGUISHING MEDIA

· Water spray or fog.
· Foam.

FIRE FIGHTING

· Alert Emergency Responders and tell them location and nature of hazard.
· Wear breathing apparatus plus protective gloves.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 100 metres in all directions.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible solid which burns but propagates flame with difficulty.
 - Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), sulfur oxides (SO_x), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Environmental hazard - contain spillage.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.

MAJOR SPILLS

- Environmental hazard - contain spillage.
- Clear area of personnel and move upwind.
- Alert Emergency Responders and tell them location and nature of hazard.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

RECOMMENDED STORAGE METHODS

- Lined metal can, Lined metal pail/drum
- Plastic pail.

STORAGE REQUIREMENTS

- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- ethoxysulfuron: CAS:126801-58-9

PERSONAL PROTECTION



RESPIRATOR

Particulate

EYE

- Safety glasses with side shields
- Chemical goggles.

HANDS/FEET

■ Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.

- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.

- Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

OTHER

■ No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.

ENGINEERING CONTROLS

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Mixes with water.

State	Divided Solid	Molecular Weight	398.4
Melting Range (°F)	286- 297	Viscosity	Not Applicable
Boiling Range (°F)	Not Applicable	Solubility in water (g/L)	Miscible
Flash Point (°F)	Not Available	pH (1% solution)	Not Available
Decomposition Temp (°F)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°F)	725	Vapor Pressure (mmHg)	49.504 x 10 ⁻⁸ (20 C)
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	1.48 g/cm ³ (20 C)
Lower Explosive Limit (%)	Not Available	Relative Vapor Density (air=1)	Not Applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not Applicable

APPEARANCE

White to light-brown fine powder, with non-characteristic odour, partially agglomerated to smooth lumps; mixes with water (1.35 g/l, 20 C)
Solubilities (g/l, 25 C): methanol 7.7, 2-propanol 1.0, acetone 36, ethyl acetate 14.1, toluene 2.5, n-hexane 0.006, 1,2-dichloroethane 107, dimethyl sulfoxide >500, polyethylene glycol 22.5 pKa 5.28

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY

■ Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

ethoxysulfuron

TOXICITY AND IRRITATION

ETHOXYLSULFURON:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY	IRRITATION
Oral (Rat) LD50: 2669 mg/kg *	Skin : Not irritating *
Inhalation (Rat) LC50: >3600000 mg/m ³ /4h	Eye : Not irritating *
Dermal (Rat) LD50: >4000 mg/kg *	

* Sigma Aldrich SDS

Short-term Studies

Ethoxysulfuron was administered in the diet to mice for 4 weeks at concentrations of 0, 2000, 4000 and 8000 ppm. No treatment-related changes were observed in clinical observations, haematology, clinical biochemistry and gross pathology.

Rats received ethoxysulfuron in the diet at concentrations of 0, 1000, 3000 or 10000 ppm for 4 weeks. Decreased body weight gain, urea, glucose and total protein, and increased liver weight were observed at 10000 ppm. Females at this dose group had increased cholesterol and triglyceride. Slight changes in the protein electrophoretic pattern were also noted at 10000 ppm.

Rats received ethoxysulfuron in water by application to the skin, at doses of 0, 250, 500 or 1000 mg/kg bw/day for 4 weeks. There were no treatment-related changes in clinical observations, haematology, clinical chemistry, urinalysis and pathology.

Rats were exposed to ethoxysulfuron by inhalation (nose-only) at concentrations of 0, 0.04, 0.2 or 1.0 mg/L for 21 days.

Rats at 1.0 mg/L showed irregular breathing, lowered eyelids and increased salivation, but these signs were reversible. At necropsy, females at 1.0 mg/L had some abnormal cells in the cuboidal epithelium in the larynx, which was accompanied by a minimal increase in cell numbers in 2 animals. This change was also reversible.

Sub-chronic Studies

Mice received ethoxysulfuron at 0, 1000, 3000 or 9000 ppm in the diet for 13 weeks. Decreased WBC (white blood cells) were observed in males at 9000 ppm. Females at 9000 ppm had increased glucose and liver weights, while males at this dose level had decreased glucose. Increased incidences of enlarged liver cells were observed in both sexes at 9000 ppm. Females at 9000 ppm had an increased incidence of fatty change in the liver.

The NOEL was 3000 ppm (492.3 mg/kg bw/day) based on decreased WBC, changes in glucose levels and hepatotoxicity at 9000 ppm.

Rats received ethoxysulfuron at 0, 1000, 3000 or 9000 ppm in the diet for 13 weeks.

Decreased food consumption, body weight gain, bilirubin and potassium were noted at 9000 ppm. Females at 3000 ppm also had decreased bilirubin. Decreased triglyceride, glucose, AST (aspartate aminotransferase), and prolonged thromboplastin time (PT) were observed in males at 3000 and/or 9000 ppm. Males at all dose levels had decreased gamma-globulin, while females at 9000 ppm had decreased gamma-globulin and protein. All these changes were reversible, except for decreased glucose.

A NOEL was not established based on decreased gamma-globulin in males at 1000 ppm and above.

Dogs received ethoxysulfuron at 0, 400, 2000 or 5000 ppm in the diet for 13 weeks.

Decreased food consumption was recorded in both sexes at 5000 ppm. Males at 5000 ppm had increased MCV (mean corpuscular [cell] volume) and MCH (mean corpuscular [cell] haemoglobin) and decreased albumin, while females at this dose level had increased monocytes and decreased LDH (lactate dehydrogenase) and gamma-globulin. These changes were reversible after a 4-week recovery period. Increased liver weight was observed at 5000 ppm and higher thyroid gland weight was recorded in all dose groups. The latter change was associated with thyroid follicular hyperplasia at all dose levels, which was not reversed after the recovery period.

A NOEL was not established, based on increased thyroid weight and follicular hyperplasia in the thyroid across all dose levels.

Dogs received ethoxysulfuron at 0, 20, 200 or 2000 ppm in the diet for 13 weeks.

Decreased APTT (activated partial thromboplastin time) and increased total lipids, cholesterol, phospholipid, alpha2-globulin and ALT (alkaline phosphatase) were observed in females at 2000 ppm. Males at 2000 ppm had decreased T4 and increased ?-globulin, while both sexes at this dose level had increased glutamate dehydrogenase. All these changes were reversed at the end of the recovery period. Increased liver weight (female only) and higher incidences of increased numbers of parafollicular cells in the thyroid gland (male only) were observed at 2000 ppm.

The NOEL was 200 ppm (6.2 mg/kg bw/day) based on decreased APTT, changes in clinical chemistry, and increased liver weight and higher incidences of increased parafollicular cells in the thyroid gland at 2000 ppm.

Chronic/Carcinogenicity Studies

Mice received ethoxysulfuron at 0, 70, 700 or 7000 ppm in the diet for 52 or 101/102 weeks.

Decreased food consumption (female only) and body weight gain and increased RBC (male only) were observed at 7000 ppm. Reduced platelets and WBC were observed at 7000 ppm in males and females, respectively. Females had decreased adrenal weights, increased incidences of corneal ulcer in the eyes and atrophy in the mandibular glands at 7000 ppm. Males had increased pigment deposits in the liver at 7000 ppm.

The NOEL was 700 ppm (100 mg/kg bw/day) based on decreased food consumption, body weight gain and adrenal weight, haematology changes, corneal ulcer and atrophy of the mandibular glands at 7000 ppm.

Rats received ethoxysulfuron at 0, 80, 800 or 8000 ppm in the diet for 52, 104 or 118 weeks.

Decreased food consumption, body weight gain, bilirubin, cholesterol, T3, T4, gamma-globulin and alpha2-globulin, and increased lactate dehydrogenase and TSH were observed at 8000 ppm. Higher incidences of sinus congestion and histiocytosis in the mesenteric lymph nodes, distended bursa in the ovary, and congestion in the thymus were observed at 8000 ppm. Increased incidences of bile duct proliferation and enlarged centrilobular cells in the liver, at week 52 only, were observed in male rats at 8000 ppm.

Females had higher incidences of luminal dilation and congestion in the uterus, inflammation in the exorbital lacrimal gland, and granulopoiesis and congestion in the bone marrow at week 118. Neoplastic findings at 8000 ppm included increased uterine adenocarcinoma in females but the incidence of these tumours was higher than normal in the control group as well.

The NOEL was 800 ppm (38.94 mg/kg bw/day) based on decreased body weight gain and changes in clinical chemistry and pathology at 8000 ppm.

Dogs received ethoxysulfuron at 0, 125, 500, 2000 or 8000 ppm in the diet for 52 weeks.

Decreased food consumption (female only) and body weight gains were observed at 8000 ppm. MCV and MCH were increased in males at 8000 ppm and in females at 2000 and 8000 ppm. Females at 2000 ppm had increased triglycerides, while both sexes at 8000 ppm had elevated total lipids, triglycerides, ALP and iron, and reduced creatinine and albumin. At necropsy, higher liver, thyroid and kidney weights, and decreased prostate weights were observed in males and/or females at 8000 ppm. Higher incidences of granulated bile in the gallbladder and increased septal hepatitis (male dogs only) and bile duct proliferation were also recorded at 8000 ppm.

The NOEL was 500 ppm (15.5 mg/kg bw/day) based on haematological and clinical chemistry changes at 2000 ppm and above.

Reproduction Studies

In a preliminary study, ethoxysulfuron at concentrations of 0, 400, 2000 or 8000 ppm in the diet was administered to rats during a 3-week pre-mating period and throughout the mating, gestation and lactation periods.

Decreased food consumption and body weight gain were observed in adults at 8000 ppm. Reduced implantation sites and lower pup body weight gain were observed at 8000 ppm. Decreased ovary weight was observed in dams at 2000 ppm and above, while increased liver weight was seen in 8000 ppm parents and lower liver weight was evident in 8000 ppm pups.

Ethoxysulfuron at concentrations of 0, 200, 1000 or 5000 ppm in the diet was administered continuously to two successive generations of rats.

Decreased food consumption and body weight gain were observed at 5000 ppm in both F0 and F1 adults. During the lactation period, lower body weight gain was noted in F1 and F2 pups at 5000 ppm.

The NOEL was 1000 ppm (91.5/128.8 mg/kg bw/day) for general and reproduction toxicity based on decreased food consumption and body weight gain in adults and pups at 5000 ppm.

Developmental Studies

Pregnant rats received ethoxysulfuron by gavage at concentrations of 0, 200, 400, or 800 mg/kg bw/day on day 7 through day 16 of gestation.

Increased urinary excretion and hairloss, reduced food consumption and body weight gain were observed in dams at 400 and/or 800 mg/kg bw/day. In the 800 mg/kg bw/day group, fetuses showed lower placental and body weights and shorter body length. Skeletal examinations revealed increased fetuses at 800 mg/kg bw/day with partial or absent ossification of various bones and higher incidences of extra vertebra/ribs. Fetuses at 400 mg/kg bw/day also showed increased incidences of non-ossified or partially ossified sternebra.

The maternal and foetal NOEL was 200 mg/kg bw/day based on increased urinary excretion and hairloss, reduced food consumption and body weight gain in dams, and retarded foetal development at 400 mg/kg bw/day and above.

Pregnant rabbits received ethoxysulfuron by gavage at concentrations of 0, 25, 63, or 160 mg/kg bw/day on days 6 through 18 of gestation. One dam at 25 mg/kg bw/day was killed moribund. Three rabbits in the 160 mg/kg bw/day group were found to have vaginal haemorrhage and two of them were killed before the end of the study. Decreased or no faeces was

observed in dams at 63 and 160 mg/kg bw/day. Dams at 160 mg/kg bw/day lost body weight. Increased abortion or premature delivery were seen at 160 mg/kg bw/day, which resulted in reduced dams with viable fetuses.

Increased post-implantation loss and late intrauterine deaths were observed at 160 mg/kg bw/day, which led to decreased mean live fetuses. At 160 mg/kg bw/day, there were twice as many female as male fetuses.

Decreased placental and body weight, shorter body length and higher neonatal mortality were observed in fetuses at 160 mg/kg bw/day. Also at this dose level, there were increases in haematoma in the apex of the heart, enlarged stomach filled with fluid or soft mass, fused or longitudinally displaced sternebra and a short and/or abnormally long rib on one or both sides of the 13th thoracic vertebra. Dead or prematurely delivered fetuses were severely stunted.

The maternal NOEL was 25 mg/kg bw/day based on decreased or no faeces at 63 mg/kg bw/day and above.

The foetal NOEL was 63 mg/kg bw/day based on embryotoxicity, retarded foetal development and foetal abnormalities at 160 mg/kg bw/day.

Genotoxicity Studies
Ethoxysulfuron was not genotoxic in a battery of genotoxicity studies including the Ames test, in vitro HGPRT mutation test, unscheduled DNA synthesis in rat hepatocytes and chromosome aberration tests in cultured mammalian cells and bone marrow in mice.

Other Studies

Tests with four impurities of ethoxysulfuron showed low acute oral toxicity with LD50s = 2669, 2568, 1876 and 606 mg/kg bw, respectively.

Six metabolites/impurities of ethoxysulfuron showed negative results in the Ames test.

The ADI for ethoxysulfuron was established at 0.06 mg/kg bw/day based on a NOEL of 6.2 mg/kg bw/day in the 3-month dog study. A 100-fold safety factor was used in recognition of the extensive toxicological database available for ethoxysulfuron.

Section 12 - ECOLOGICAL INFORMATION

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

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

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

‡ Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

Section 14 - TRANSPORTATION INFORMATION



DOT:

Symbols: G Hazard class or Division: 9

Identification Numbers: UN3077 PG: III

Label Codes: 9 Special provisions: 8, 146,

335, B54,

IB8, IP3,

N20, T1,

TP33

Packaging: Exceptions: 155 Packaging: Non- bulk: 213

Packaging: Exceptions: 155 Quantity limitations: No limit

Passenger aircraft/rail:

Quantity Limitations: Cargo No limit Vessel stowage: Location: A
aircraft only:

Vessel stowage: Other: None

Hazardous materials descriptions and proper shipping names:

Environmentally hazardous substance, solid, n.o.s

Air Transport IATA:

ICAO/IATA Class: 9 ICAO/IATA Subrisk: None

UN/ID Number: 3077 Packing Group: III

Special provisions: A97

Cargo Only

Packing Instructions: 400 kg Maximum Qty/Pack: 400 kg

Passenger and Cargo Passenger and Cargo

Packing Instructions: 956 Maximum Qty/Pack: 956

Passenger and Cargo Limited Quantity Passenger and Cargo Limited Quantity

Packing Instructions: 30 kg G Maximum Qty/Pack: Y956

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. *(CONTAINS ETHOXYLSULFURON)

Maritime Transport IMDG:

IMDG Class: 9 IMDG Subrisk: None

UN Number: 3077 Packing Group: III

EMS Number: F-A , S-F Special provisions: 179 274 335 909

Limited Quantities: 5 kg Marine Pollutant: Yes

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Section 15 - REGULATORY INFORMATION

No data for ethoxysulfuron (CAS: , 126801-58-9)

Section 16 - OTHER INFORMATION

Reasonable care has been taken in the preparation of this information, but the author makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The author makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. For additional technical information please call our toxicology department on +800 CHEMCALL.

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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Issue Date: Nov-9-2010

Print Date: Mar-26-2011