

# MATERIAL SAFETY DATA SHEET

## BLANKET™ HERBICIDE



MSDS Ref. No: 122836-35-5-5a

Version: Global

Date Approved: 02/20/2003

Revision No: New MSDS

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 2001/58/EC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** BLANKET™ HERBICIDE

**ACTIVE INGREDIENT:** Sulfentrazone

**CHEMICAL FAMILY:** Aryl Triazolinone

**MOLECULAR FORMULA:** C<sub>11</sub>H<sub>10</sub>Cl<sub>2</sub>F<sub>2</sub>N<sub>4</sub>O<sub>3</sub>S (sulfentrazone)

**SYNONYMS:** FMC 97285; F6285; N-[2,4-dichloro-5-[4-difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide;  
**IUPAC:** N-[2,4-dichloro-5-(4-difluoromethyl-3-methyl-5-oxo-4,5-dihydro-[1,2,4]triazol-1-yl)phenyl]methane sulfonamide

### MANUFACTURER

TENKOZ, INC.  
100 N. Point Center East, Suite 330  
Alpharetta, GA 30022

### Emergency Telephone Numbers:

Emergency Phone (800) 424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt.%</u>	<u>PEL/TLV</u>	<u>EC No.</u>	<u>EC Class</u>
Sulfentrazone	122836-35-5	75	None	None	None

Surfactant Blend	0000-00-0	<12	None	None	None
Toluene	108-88-3	<5	200 ppm 300 ppm 50 ppm (skin)	601-021-00-3	R11-20

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### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### IMMEDIATE CONCERNS:

- Light- to dark-brown, free-flowing granules with a slight musty odor.
- Slightly combustible. May support combustion at elevated temperatures.
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- Slightly toxic to fish and aquatic organisms. Keep out of drains and water courses.
- Moderate inhalation toxicity.

**POTENTIAL HEALTH EFFECTS:** Effects from overexposure result from inhaling this product. Symptoms of overexposure include convulsions, tremors, increased sensitivity to touch and sound, labored breathing, decreased locomotion, tearing, nasal discharge and incoordination.

**MEDICAL CONDITIONS AGGRAVATED:** None presently known.

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### 4. FIRST AID MEASURES

**EYES:** Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.

**SKIN:** Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

**INGESTION:** Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Contact a medical doctor.

**INHALATION:** Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

**NOTES TO MEDICAL DOCTOR:** This product has moderate inhalation toxicity, and low oral and dermal toxicity. It is mildly irritating to the eyes and slightly irritating to the skin. This product contains a granular material (clay) that may cause mechanical irritation to the eyes. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

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## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Foam, CO2 or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

**FIRE / EXPLOSION HAZARDS:** Slightly combustible. This material may support combustion at elevated temperatures.

**FIRE FIGHTING PROCEDURES:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen fluoride.

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## 6. ACCIDENTAL RELEASE MEASURES

**RELEASE NOTES:** Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

Keep material out of lakes, streams, ponds and sewer drains. Large spills should be covered to prevent dispersal. For dry material, use a wet sweeping compound or water to prevent the formation of dust. If water is used, prevent runoff or dispersion of excess liquid by diking and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump all waste material, including absorbent, into a drum and label contents for disposal.

To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

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## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do

not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For dust exposure, wear chemical protective goggles or a face shield.

**RESPIRATORY:** For dust exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

**PROTECTIVE CLOTHING:** Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

**WORK HYGIENIC PRACTICES:** Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking or using tobacco. Shower at the end of the workday.

#### GLOVES:

Wear chemical protective gloves made of materials such as butyl rubber, nitrile or neoprene. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

**COMMENTS:** Personal protective recommendations for mixing or applying this product are prescribed on the product label. Information stated above provides useful, additional guidance for individuals whose use or handling of this product is not guided by the product label.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Slightly musty

**APPEARANCE:** Light- to dark-brown, free-flowing granules

**pH:** 6.5 - 7.5 (5% suspension)

**SOLUBILITY IN WATER:** Disperses  
**DENSITY:** (Bulk) 38 - 40 lb/cu ft. @ 20°C  
**MOLECULAR WEIGHT:** 387.19 (sulfentrazone)

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## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Excessive heat and fire.  
**STABILITY:** Stable  
**POLYMERIZATION:** Will not occur

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## 11. TOXICOLOGICAL INFORMATION

**DERMAL LD<sub>50</sub>:** >5000 mg/kg (rat)

**ORAL LD<sub>50</sub>:** 2416 mg/kg (rat)

**INHALATION LC<sub>50</sub>:** 0.90 mg/L/4 hr (rat)

**ACUTE EFFECTS FROM OVEREXPOSURE:** This product has moderate inhalation toxicity, and low oral and dermal toxicity. It is mildly irritating to the eyes and slightly irritating to the skin. A particle size test showed the material was comprised of non-friable granules with <0.1% in the respirable range. Signs of toxicity in laboratory animals included clonic convulsions, tremors, recumbency, splayed limbs and decreased locomotion. Effects observed in laboratory animals after acute inhalation of toluene included mucous membrane irritation, motor incoordination, prostration, changes in respiratory rate, changes in serum and blood enzyme activities, elevated blood glucose and packed cell volume, decreased body weight and death. Vomiting after ingestion of this product may cause aspiration of toluene into the lungs which may result in fatal pulmonary edema.

**CHRONIC EFFECTS FROM OVEREXPOSURE:** No data available for the formulation. Sulfentrazone was not carcinogenic in lifetime feeding studies with laboratory animals, nor was it found to be mutagenic in a battery of tests. In a reproduction study, sulfentrazone produced adverse effects on the growth and survival of the offspring, decreased male fertility and oligospermia at 25 mg/kg/day, and 35 mg/kg/day. Sulfentrazone was found to be fetotoxic in oral and dermal developmental toxicity studies; the fetal NOELS were 10 mg/kg/day and 100 mg/kg/day, respectively. At labeled use rates and practices of mixing and applying, expected exposure to farm workers is at least one hundred times lower than the doses that produced effects in laboratory animals. Chronic exposure to toluene may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage. Inhalation of toluene vapors at high doses have also resulted in an

increased incidence of malformations and decreased fetal weight in laboratory animals.

#### **CARCINOGENICITY:**

IARC: Not listed

NTP: Not listed

OSHA: Not listed

OTHER: (ACGIH) Not listed

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## **12. ECOLOGICAL INFORMATION**

Unless otherwise indicated, the data presented below are for the active ingredient.

**ENVIRONMENTAL DATA:** Sulfentrazone is stable in soil (half-life = 18 months). In water, sulfentrazone is stable to hydrolysis over the pH range of 5 to 9, however, it will readily undergo photolysis (half-life < 0.5 day). Sulfentrazone has a low affinity for organic matter ( $K_{oc} = 43$ ), but is mobile only in soils with high sand content. The potential for sulfentrazone to bioaccumulate is very low, having a Log  $P_{ow}$  of 1.48, and a bioconcentration factor of 1.1 - 2.0.

**ECOTOXICOLOGICAL INFORMATION:** Sulfentrazone is slightly toxic to fish and aquatic arthropods, with LC<sub>50</sub> values ranging from 60.4 mg/L to > 130 mg/L. Sulfentrazone has a very low order of toxicity to upland game birds (oral LD<sub>50</sub> > 2,250 mg/kg).

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## **13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

**EMPTY CONTAINER:** Completely empty package into application equipment. Then dispose of empty package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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## **14. TRANSPORT INFORMATION**

## **SPECIAL SHIPPING NOTES:**

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

Non-Bulk Packages:

Notes: Material is not subject to the hazardous materials regulations when transported within the U.S.A.

Bulk Packages:

Notes: Material is not subject to the hazardous materials regulations when transported within the U.S.A.

INTERNATIONAL MARITIME DANGEROUS GOODS CODE:

Notes: Material is not subject to the IMDG Code when transported by water internationally.

ADR - EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD:

Road or Rail: ADR

Notes: Material is not subject to the European road regulations when transported by highway within and between signatory countries to the ADR.

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) /  
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

Notes: Material is not subject to the ICAO / IATA when transported globally.

HARMONIZED SYSTEM:

Import to the U.S.A.: 3808.30.1500

Export from the U.S.A.: 3808.30.0000

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## **15. REGULATORY INFORMATION**

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):** Not listed

**SECTION 311 HAZARD CATEGORIES (40 CFR 370):** Immediate, Delayed

**SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):** The threshold planning quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs. This product contains the following ingredients with a TPQ of less than 10,000 lbs.: None

**SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):** This product contains the following ingredients subject to Section 313 reporting requirements: (toluene)

**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT):** Listed.

<u>Chemical Name</u>	<u>Wt.%</u>	<u>RQ</u>
Toluene	<5	1000 lbs.

**COMMENTS:**

Australian Hazard Code : 3XE

U.S. EPA Signal Word : CAUTION

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**16. OTHER INFORMATION**

**REVISION SUMMARY** New MSDS

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