# Roundup Ready-To-Use Weed & Grass Killer MSDS # 7008

# MATERIAL SAFETY DATA SHEET

**DATE PREPARED:** 04/07/1999
**MSDS No:** 7008
**Roundup Ready-To-Use Weed & Grass Killer**

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Roundup Ready-To-Use Weed & Grass Killer
**PRODUCT DESCRIPTION:** Herbicide

### MANUFACTURER

Monsanto Company
Lawn & Garden Products
41 South High Street
Columbus, OH 43215

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**Emergency Phone** 1-800-225-2883

**EPA REG. NO.:** 71995-8 **PN:** 6035-E

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS# |
|---|---|---|
| Glyphosate, isopropylamine salt | 0.96 | 38641-94-0 |

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Yellow or off-white hazy liquid.

IMMEDIATE CONCERNS: CAUSES EYE IRRITATION
AVOID CONTACT WITH EYES OR CLOTHING
WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING
KEEP OUT OF REACH OF CHILDREN

### POTENTIAL HEALTH EFFECTS

EYES: This substance causes moderate eye irritation as indicated by possible discomfort,

tearing, swelling, redness, and blurred vision. See Toxicological Information, section 11.

SKIN: This substance is not expected to cause skin irritation. See Toxicological Information, section 11.

INGESTION: If swallowed, this product may cause gastrointestinal tract irritation. See Toxicological Information, section 11.

INHALATION: If inhaled, this substance is considered practically non-toxic to internal organs. This substance may be irritating if inhaled. See Toxicological Information, section 11.

**COMMENTS HEALTH:** Inhalation and skin contact are expected to be the primary routes of occupational exposure to ROUNDUP. Occupational exposure to this material has not been reported to cause significant adverse health effects. However, swallowing of a similar, but more concentrated formulation, has been reported to produce gastrointestinal discomfort, nausea, vomiting and diarrhea.

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# 4. FIRST AID MEASURES

**EYES:** Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Call a physician if irritation persists.

**SKIN:** No first aid procedures are required. As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.

**INGESTION:** If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take person and product container, with label, to an emergency treatment center.

**INHALATION:** Since this material is not expected to be an immediate inhalation problem, no first aid procedures are required. If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

**ADDITIONAL INFORMATION:** Medical Information: Call day or night, 1-800-225-2883

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# 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** >212°F TAG CC

**EXTINGUISHING MEDIA:** Water spray, foam, CO2, dry chemical or any class B extinguishing agent.

**FIRE FIGHTING PROCEDURES:** For fires involving this material, do not enter any

enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Equipment should be throughly cleaned after use. Read the entire document.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Soak up spilled material with paper towels and discard in trash.

**LARGE SPILL:** Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

**GENERAL PROCEDURES:** Observe all protection and safety precautions when cleaning up spills -- see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 225-2883.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Keep pesticide in original container. For containers larger then 24 oz.: Place sprayer nozzle under handle on container so the sprayer is not below level of contents of container to prevent leakage. Store in a secure, preferably locked, storage area. Protect container from freezing.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** No special ventilation is necessary.

**PERSONAL PROTECTION**

EYES AND FACE: For application of product in accordance with label instructions, no special eye protection is needed.

Where there is significant potential for eye contact, wear chemical goggles and have eye flushing equipment available.

SKIN: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin throughly after handling.

RESPIRATORY: Avoid breathing vapor or mist.

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# 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**APPEARANCE:** Clear liquid

**pH:** ~7.1 to 7.5

**SOLUBILITY IN WATER:** Soluble

**SPECIFIC GRAVITY:** 1.01 gr/cc at 20°C

**VISCOSITY:** Same as water.

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# 10. STABILITY AND REACTIVITY

**STABLE:** YES

**HAZARDOUS POLYMERIZATION:** NO

**HAZARDOUS DECOMPOSITION:** None.

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# 11. TOXICOLOGICAL INFORMATION

## ACUTE

EYES: rabbit - moderately irritating, irritation cleared by test day 7.
EPA FIFRA toxicity category - III.

DERMAL $LD_{50}$: Practically non-toxic, (Rat) LD50 >5.0 gm/Kg; EPA FIFRA toxicity category

- IV. Nonirritating to skin (Rabbit); EPA FIFRA toxicity category - IV.

ORAL $LD_{50}$: Rat = >5.0 g/kg.
EPA FIFRA toxicity category - IV.

INHALATION $LC_{50}$: Practically non-toxic, (Rat 4-hr LC50 >10mg/L). EPA FIFRA toxicity category - IV.

**SENSITIZATION:** Guinea pig - no evidence of allergic skin reactions.

**CHRONIC:** Data from glyphosate laboratory toxicology studies were conducted with a formulation comprised of 62% isopropylamine salt of glyphosate (MON 0139).
Rabbits - 3 week dermal: Repeated daily primarily resulted in slight skin irritation.
Dogs - 6 month feeding: Only slight body weight changes noted.
Rats - 90 day feeding: No treatment related effects.
Mice - 90 day feeding: Decreased weight gains at the high dose level group animals.

**CARCINOGENICITY:**

**CARCINOGENICITY COMMENTS:** GLYPHOSATE: Glyphosate is not considered to be a carcinogen. Glyphosate did not produce tumors in any of the long-term toxicology studies. EPA has classified glyphosate in category "E" (Evidence of noncarcinogenicity for humans).
Mice: 2-year feeding study. Reduced body weight gain and effects on liver tissues were observed at high dose levels.
Rats: 2-year feeding study. Reduced body weight gain and eye changes were observed at the high dose level in one study, while no treatment related effects occurred in a second study conducted at lower dose levels.
Dogs: No adverse effects were observed in feeding studies with dogs.

**TERATOGENICITY:** GLYPHOSATE: No evidence of teratogenic effects. Results of rat and rabbit teratology studies indicate that no birth defects were noted. This included dose levels of glyphosate that were maternally toxic.

**REPRODUCTIVE TOXIN:** GLYPHOSATE: No evidence of adverse reproductive effects. Glyphosate was fed continuously to rats at very high dose levels for 2 successive generations. Toxicity was reported in offspring from the high dose, a level which also produced adverse effects on the mothers. In a 3-generation study conducted at lower dose levels, no effects were seen on the ability of male or female rats to reproduce.

**MUTAGENICITY:** GLYPHOSATE: Glyphosate has not produced any genetic changes in various mutagenicity tests involving animals and animal or bacterial cells.

**COMMENTS:** See Section 16 for definition of EPA FIFRA toxicity categories.

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# 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** ENV02

# 13. DISPOSAL CONSIDERATIONS

**FOR LARGE SPILLS:** Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

**PRODUCT DISPOSAL:** Securely wrap partially filled or empty container in several layers of newspaper and discard in trash.

**EMPTY CONTAINER:** Do not reuse spray bottle except for refill in accordance with directions on the ROUNDUP Quik Stick Grass & Weed label. If not used for refill, rinse throughly before discarding in trash.

# 14. TRANSPORT INFORMATION

## DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Not Regulated

**PRIMARY HAZARD CLASS/DIVISION:** None

**UN/NA NUMBER:** None

**PACKING GROUP:** No

**U.S. SURFACE FREIGHT CLASS:** Tree or weed killing compounds, NOI, Density of 20 lbs. or greater per cu. ft.

## AIR (ICAO/IATA)

**PROPER SHIPPING NAME:** Not Regulated

**SPECIAL SHIPPING NOTES:** The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

# 15. REGULATORY INFORMATION

## UNITED STATES

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

| PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA | | | | |
|---|---|---|---|---|
| **ACUTE:** YES | **CHRONIC:** NO | **FIRE:** NO | **REACTIVITY:** NO | **PRESSURE GENERATING:** NO |

### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA REGULATORY:** All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

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## 16. OTHER INFORMATION

### HMIS CODES

**FIRE:** 0 **HEALTH:** 1 **REACTIVITY:** 0 **PROTECTION:** -

### NFPA CODES

**FIRE:** 0 **HEALTH:** 1 **REACTIVITY:** 0 **SPECIAL:** -

**APPROVAL DATE:** 04/13/1999

**REVISION SUMMARY** New MSDSIn Section 9
Appearance (text) (pH) (From) (pH) (To)

In Section 13
Product Disposal (text)

In Section 16
Manufacturer Disclaimer (text) Section 16 Footnotes

**MANUFACTURER SUPPLEMENTAL NOTES:** EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) Toxicity Categories: The EPA toxicity categories are based on the results of the acute toxicology studies. The toxicology findings are compared to the FIFRA criteria to determine the product label signal word, precautionary and first aid statements. The EPA FIFRA toxicity category summary:

EPA FIFRA Product Label Toxicity Rating
Toxicity Category Signal Word

I DANGER Most toxic and irritating

II WARNING
III CAUTION
IV CAUTION Least toxic and irritating

**COMMENTS:** For additional information concerning this product, call the Helpline at 800-225-2883.

**MANUFACTURER DISCLAIMER:** This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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http://www.roundup.com/product_info/msds/7008.htm

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