

Sharda USA LLC
P.O. Box 640, Hockessin, DE 19707

MATERIAL SAFETY DATA SHEET
Shar-Max Glyphosate 41% SL

1. PRODUCT IDENTIFICATION

PRODUCT NAME : Shar-Max Glyphosate 41% SL
EPA REGISTRATION NO. : EPA registration of this product is pending
PRODUCT USE : Herbicide
CHEMICAL NAME : Isopropylamine Salt of Glyphosate
CHEMICAL CAS NO. : 38641-94-0
NOMINAL CONCENTRATION OF ACTIVE INGREDIENT : 41%
NOMINAL CONCENTRATION OF OTHER INGREDIENTS : 59%

2. HAZARDOUS INGREDIENTS:

INGREDIENT NAME/CAS : Isopropylamine Salt of Glyphosate, CAS No. 38641-94-0
EXPOSURE LIMITS : OSHA: Not Established
ACGIH: Not Established
CONCENTRATION (%) : 41.0%

3. HAZARDS SUMMARY

HEALTH: Moderate eye irritant.
PHYSICAL: May react with metals such as galvanized or mild steel to produce hydrogen gas which could form a highly combustible gas mixture.
ENVIRONMENTAL: Moderately toxic to fish and aquatic plants. May be toxic to non-target plants.

4. PHYSICAL PROPERTIES

PHYSICAL FORM : Liquid
COLOR : Light-yellow
ODOR : Odorless
BULK DENSITY : 1.1663 ± 0.0003 at 20 ± 1°C
PH : 5.72 ± 0.04 at 20°C

5. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable at 0°C for 7 days.—may decompose if heated.
CONDITIONS TO AVOID : Temperatures above 115°F (46°C) and temperatures below 25° (-5°C).
INCOMPATIBLE WITH: Strong oxidizers or bases, mild and galvanized steel, potassium permanganate
HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide, Nitrogen oxides, phosphorous oxides.
HAZARDOUS POLYMERIZATION : Product will not undergo polymerization

6. FIRE AND EXPLOSION DATA

FLASH POINT : Not flammable
EXTINGUISHING MEDIA : Water, Dry Chemical, Foam
FIRE/EXPOSION HAZARD : May decompose in fire releasing irritating or toxic gases.
HAZARDOUS COMBUSTION PRODUCTS : Carbon monoxide, nitrogen oxides, phosphorous oxides.
SPECIAL FIRE FIGHTING PROCEDURES : Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems are recommended to prevent environmental damage due to water run-off.

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7. EMERGENCY AND FIRST AID PROCEDURES

FIRST AID FOR EYES	:	Hold eyelids open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
FIRST AID FOR INGESTION		If swallowed, call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
FIRST AID FOR INHALATION		Move person fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for treatment advice.
FIRST AID FOR SKIN	:	In case of contact, remove contaminated clothing and rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
EMERGENCY TELEPHONE NUMBERS		For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222 . For chemical emergency assistance (spill, leak, fire, accident) call ChemTrec at 1-800-424-9300 .

8. ACCIDENTAL RELEASE MEASURES

SMALL SPILL	Absorb spilled material with sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.
LARGE SPILL	Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash, or lime.

WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 9)

9. EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS	Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
PERSONAL PROTECTIVE EQUIPMENT	EYES: Wear safety goggles when mixing, loading, or cleaning equipment. CLOTHING: Long-sleeved shirt, long pants, shoes, and socks. HANDS: Wear water-proof gloves when mixing, loading, or cleaning equipment.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water.

USER SAFETY RECOMMENDATIONS: Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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10. STORAGE AND DISPOSAL MEASURES

KEEP OUT OF REACH OF CHILDREN

- HANDLING/STORAGE PRECAUTIONS : STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake or roll to mix well before using.
- PESTICIDE DISPOSAL : Wastes resulting from the use of Shar-Max Glyphosate 41% SL that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container retains vapor and product residue. Observe all label safeguards until container is destroyed.
- CONTAINER DISPOSAL : PLASTIC BOTTLES AND NON-RETURNABLE PLASTIC DRUMS: Do not reuse container. Triple rinse container. Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
RETURNABLE / REFILLABLE CONTAINERS: After use, return the container to the point of purchase or designated locations. The container must only be refilled with Shar-Max Glyphosate 41% SL. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

11. SHIPPING INFORMATION

- DOT HAZARD CLASS : Non-Regulated
- IMO / IMDG CODE (OCEAN):
HAZARD CLASS DIVISION : Non – Regulated
NUMBER
- ICAO / IATA (AIR):
HAZARD CLASS DIVISION : Non – Regulated
NUMBER

12. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

- ORAL LD50 : >2,000 mg/kg (rat)
DERMAL LD 50 : >2,000 mg/kg (rat)
INHALATION LD 50 : 4 hr exposure >0.896 mg/L (rat)
- EYE EFFECTS : Non-irritating.
SKIN EFFECTS : Non-irritating.
SKIN SENSITIZATION : Rabbit: Not a dermal sensitizer.
- MUTAGENICITY : No evidence of mutagenic effects during *in vivo* or *in vitro* studies.
CARCINOGENICITY : OSHA/NTP/IARC: Not listed

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13. FEDERAL REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY : Not listed

SARA TITLE III SECTION 311/312 HAZARD CATEGORIES : Immediate health hazard; delayed health hazard

CA PROP 65 : Not listed.

14. OTHER REGULATORY INFORMATION

NMIS HAZARD RATINGS

Health : 2
Flammability : 0
Physical Hazard : 1

Key: 4=severe 3=serious 2=moderate 1=slight 0=minimal

15. ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY : Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning of equipment or disposing of equipment washwaters.

FISH TOXICITY (Glyphosate Acid) : 96 Hour LC₅₀, Rainbow Trout: 8.2 mg/L
96 Hour LC₅₀, Bluegill: 5.8 mg/L.

AVIAN TOXICITY (Glyphosate Acid) : Oral LD₅₀ Bobwhite Quail: > 3,800 mg/kg
Oral LD₅₀ Mallard Duck - Unknown

BEE : Non-toxic

MSDS NUMBER : #1, October 8, 2009

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