



SAFETY DATA SHEET

DREXEL DUPLICATOR 6 HERBICIDE

Section 1: Material Identification

Product Name: Drexel Duplicator 6 Herbicide
EPA Reg No.: 19713-700
CAS NO: 69254-40-6
Formula: C₃H₁₄N₃O₅P
Company: Drexel Chemical Company
1700 Channel Avenue
Memphis, TN 38106

DOT label: See Section 14 Transport Information

Emergency Telephone Number:

CHEMTREC
Tel: 1-800-424-9300

Drexel Chemical Co.
901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see **Section 15. REGULATORY INFORMATION** for explanation.

Section 2: Hazard Identification

GHS classification

Acute toxicity - inhalation	Category 4
Eye damage/irritation	Category 2B
Acute aquatic toxicity	Category 2

GHS label elements

Signal word Warning



Hazard statement	Harmful if inhaled. Causes eye irritation. Toxic to aquatic life.
Precautionary statement	
Prevention	Avoid breathing mist. Use only outdoors or in a well-ventilated area. Wash exposed skin thoroughly after handling. Avoid release to the environment.
Response	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call Poison Control Center or Doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage
Storage	Store in a cool, dry, well ventilated, and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store near children, food, foodstuffs, drugs or potable water supplies.
Disposal	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 regulatory authorities.

Section 3: Composition Information

<u>Components</u>	<u>% By Wt.</u>	<u>OSHA PEL:</u>	<u>ACGIH TLV:</u>
Active Ingredient: Diammonium salt of glyphosate CAS 69254-40-6	49.6%	N/Av	5 mg/m ³
Other Ingredients:	50.4%	N/A	N/A

This product contains 648 grams per liter or 5.4 pounds per U.S. gallon of glyphosate in the form of its diammonium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of glyphosate acid.

Section 4: First-Aid Measures

Have the product label or container with you when calling a poison control center or doctor or going for treatment.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 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.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water then 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.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Section 5: Fire Fighting Measures

Fire Hazards: Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Thermal decomposition during a fire can produce fumes and irritating gases.

Flammability classification (OSHA 29 CFR 1910.1200): Non-Combustible.

Flash point: >200°F

Lower flammable limit (% by volume): N/Av

Upper flammable limit (% by volume): N/Av

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Evacuate the area and fight the fire from upwind at a safe distance to avoid hazardous vapors or decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff.

Firefighting media: Use foam, dry chemical, carbon dioxide, or water fog when fighting fires involving this product. Do not use water jet, as this may spread burning material. Minimize the use of water to avoid environmental contamination. Contain all runoff.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Use full face shield and operate in positive pressure mode. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Hazardous Combustion Products: Carbon oxides, Phosphorus oxides, nitrogen oxides, and irritating fumes and smoke.

(NFPA):	Health:	Flammability:	Reactivity:
	2	1	0

Section 6: Accidental Release Measures

Steps to be taken if Material is Released or Spilled:

- Contain spilled material if possible. Small spills: Absorb with earth, sand or absorbent material and sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Drexel Chemical Co. for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

Personal Precautions:

- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions:

- Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Section 7: Handling and Storage

KEEP OUT OF REACH OF CHILDREN

- Handling:** **General Handling:** Avoid contact with eyes, skin, and clothing. When using do not eat, drink, or smoke. Wash thoroughly after handling. Do not swallow. Avoid breathing vapor. Use with adequate ventilation. Wear chemical protective equipment when handling. See Section 8, Exposure Controls and Personal Protection.
- Storage:** Store in a cool, dry, well ventilated, and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

Section 8: Exposure Controls/ Personal Protection

Exposure Limits: TLV Glyphosate 5 mg/m³

Personal Protection:

Eye/Face Protection: Wear safety glasses with side shields or chemical splash goggles to prevent vapors or mists from entering the eyes. If using a full-face shield, always use safety glasses or goggles along with the face shield to ensure adequate protection of the eyes.

Skin Protection: If repeated or prolonged contact wear chemical resistant gloves. Mixers, loaders, applicators and other handlers must wear long sleeved shirt, long pants and shoes plus socks. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

Hand protection: Wear chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride (PVC), or Viton.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. When handling in enclosed areas, when large quantities of mists are generated, or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Precautionary statement: CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash

thoroughly with soap and water after handling.

Engineering Controls:

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS. **Important:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for applicators and other handlers and have such PPE immediately available for use in an emergency such as a spill or equipment breakdown.

Section 9: Physical and Chemical Properties

Appearance:	Clear yellow liquid
Odor:	Slight @ 21°C
Odor threshold:	N/Av
pH:	7.5 @ 21°C
Melting point/freezing point:	N/Av
Solubility (water):	N/Av
Boiling point:	N/Av
Flash point:	>200°F
Evaporation rate:	N/Av
Flammability:	Non-combustible
Upper/lower flammability or explosive limits:	N/Av
Vapor pressure (mmHg):	N/Av
Vapor density:	N/Av
Density:	10.69 Lbs./gal @ 21°C
Partition coefficient (n-octanol/water):	N/Av
Autoignition temperature:	N/Av
Decomposition temperature:	N/Av
Viscosity:	260cP @ 21°C
Explosive properties:	N/Av

Section 10: Stability and Reactivity

- Stability/Instability:** Thermally stable at typical use temperatures and in closed containers.
- Conditions to Avoid:** Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).
- Incompatible Materials:** Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode..
- Hazardous Polymerization:** Will not occur oxides,
- Thermal Decomposition:** Decomposition products can include and are not limited to: Carbon oxides, nitrogen and phosphorus oxides

Section 11: Toxicological Information

Results from studies on a similar formulation

Acute Toxicity

Ingestion:

- Oral LD50, (rat): >5,000 mg/kg.

Dermal:

- Dermal LD50, (rabbit): >5,000 mg/kg.

Inhalation:

- LC50,(4h), Aerosol, Rat: Practically non-toxic.

Eye Irritation (rabbit):

- Moderately irritating.

Skin Irritation (rabbit):

- Moderately irritating.

Sensitization Skin (Guinea Pig):

- Non-sensitizer.

Chronic Toxicity and Carcinogenicity: This product does not contain any materials which are classified as Carcinogenic by OSHA, ACGIH, or NTP. IARC - Listed as Category 2A by the International Agency for Research on Cancer (IARC) but, in the expert opinion of the Joint Glyphosate Task Force, this classification as a carcinogen is not Warranted.

Teratogenicity, mutagenicity, and other reproductive effects: None known.

Section 12: Ecological Information

Data for the active ingredient Glyphosate:

ENVIRONMENTAL FATE:

Persistence and Degradability:

- Soil field half-life 2-174 days. Adsorbs strongly to soil.
- Water aerobic half-life < 7 days.

Aquatic Toxicity:

- Rainbow Trout: 96-hour LC50: 5.4 mg/L.
- Bluegill 96-hour LC50: 7.3 mg/L.
- Daphnia magna: 48-hour EC50: 11 mg/L.

Bird Toxicity:

- Mallard Duck 5-day dietary LC50: >5620 mg/kg.
- Bobwhite quail 5-day dietary LC50: >5620 mg/kg.

Anthropod Toxicity:

- Honey bee, oral/contact 48 hrs. LD50: 100µg/bee.

Soil Organism Toxicity:

- Earthworm acute toxicity, 14 days, LC50: >1200 mg/kg soil.

Section 13: Disposal Considerations

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 regulatory authorities. 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.

Section 14: Transport Information

DOT: Non-Regulated.

ICAO/IATA: Not hazardous.

Freight description: Agricultural Herbicide, liquid, n.o.s.

ERG Guide No: 171

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material

Section 15: Regulatory Information

OSHA: This product is hazardous according to the OSHA Hazard Communication Standard 29 CFR 1910.1200.

EPA:

- **EPA FIFRA INFORMATION**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemical. The hazard information required on the pesticide label is listed out below. The pesticide label also includes other important information, including directions for use.

Label Human Hazard Statements: CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

- **EPA/CERCLA Reportable Quantity:** NA

SARA/TITLE III:

- **Sec 302: Extremely Hazardous Substance Notification:** This material is not known to contain any Extremely Hazardous Substances.
- **Sec. 311/312. Hazard Categories:** Immediate
- **Section 313 Toxic Chemical(s):** None
- **RCRA Waste Code:** Not applicable

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

- Glyphosate is listed.

Toxic Substances Control Act (TSCA):

- All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

Section 16: Other Information

Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

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