

**FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or
CHEMTREC - DAY OR NIGHT 1-800-424-9300**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DISTRIBUTED BY:

UNITED AGRI PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273
Medical Emergencies (Prosar): 1-800-301-7976
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

PRODUCT NAME: DADS
PRODUCT USE: Fungicide
PCP REG. NO.: 29333
MSDS Number: 29333-09-UAP **MSDS Revisions:** New **Date of Issue:** 06/26/09 **Supersedes:** New

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – DANGER - POISON – DANGER SKIN IRRITANT – POTENTIAL SKIN SENSITIZER. PREVENT ACCESS BY UNAUTHORIZED PERSONNEL. WARNING: contains garlic allergen. DO NOT use if allergic to garlic. Fatal or poisonous if swallowed. May be harmful if absorbed through the skin. Harmful if inhaled. Avoid inhaling / breathing vapours or fumes. May irritate eyes. Avoid contact with eyes. Severely irritating to the skin. DO NOT get on skin. Avoid contact with clothing. Wash thoroughly after handling and before eating, drinking, or smoking. Wash contaminated clothing with soap and hot water before reuse.

This product is milky liquid with pungent odour.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Diallyl and related sulfides	90.00	2179-57-9	not listed

4. FIRST AID MEASURES

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre 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 – 20 minutes. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.

If in eyes: Hold eye 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 centre or doctor for treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976. Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°C/Test Method): 61.66°C (TCC)
FLAMMABLE LIMITS (LFL & UFL): LFL: Not available - UFL: Not available.
EXTINGUISHING MEDIA: Combustible liquid. Use medium appropriate to surrounding fire. Use water spray. Carbon dioxide (CO₂), dry powder, or foam. water mist may be used to cool closed containers.
HAZARDOUS COMBUSTION PRODUCTS: Not available.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area of intense smoke.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep product and empty containers away from heat and sources of ignition. If water is used to fight fire and/or cool containers, contain runoff, using dikes to prevent contamination of water supplies.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Evacuate personnel to safe areas. Absorb spill with inert material (e.g. dry sand or earth), sweep up material and transfer to containers for proper disposal. Clean contaminated surfaces thoroughly. Use spark-proof tools and explosion-proof equipment. Remove all sources of ignition. Ground and bond containers when transferring material. Take precautionary measures against static discharges. Check local, provincial and federal regulations for proper disposal. Consult the manufacturer or the provincial regulatory agency in case of a spill, and for clean-up of spills.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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.

STORAGE: Store in a cool, dry ventilated place away from feeds and foods.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in well-ventilated area. If vapours are too strong, use mechanical ventilation.

RESPIRATORY PROTECTION: Use a NIOSH / MSHA approved supplied-air respirator when handling the concentrated product or when loading and in case of spill or leak resulting in unknown concentration.

EYE PROTECTION: Chemical splash goggles, shielded safety glasses, or full-face shield if splashing is likely to occur.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, apron, chemical-resistant rubber boots and socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA
Not listed

ACGIH TLV-TWA
Not listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Milky liquid with pungent odour. **SOLUBILITY:** Soluble

SPECIFIC GRAVITY (Water = 1): 0,99 – 1,01 g/ml **BULK DENSITY:** 0,99 - 1,01 kg/L. **pH:** Not available

VAPOR PRESSURE: 1 mm Hg **BOILING POINT:** > 100°C

PERCENT VOLATILE (by volume): Not established **EVAPORATION RATE (Butyl Acetate = 1):** Similar to water

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Keep away from open flames, hot surfaces and sources of ignition.

INCOMPATIBILITY: Oxidizing agents. Reducing agents. Strong alkalis. Oxygen.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, oxides of sulfur, and oxides of phosphorous.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 260 mg/kg (Diallyl Disulfide) **Acute Dermal LD₅₀ (rabbit):** 3600 mg/kg (Diallyl Disulfide)

Eye Irritation (rabbit): May cause mild irritation **Skin Irritation (rabbit):** Causes severe irritation

Inhalation LC₅₀ (rat): Not available **Skin Sensitization (guinea pig):** Potential sensitizer

Carcinogenic Potential: None known.

12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not contaminate water when disposing of equipment wash water.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

CANADA TDG Shipping Description: TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS DIALLYL DISULFIDE), 6.1, UN2810, III, ERG GUIDE 153

U.S. DOT Shipping Description: TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS DIALLYL DISULFIDE), 6.1, UN2810, III, ERG GUIDE 153

U.S. and Canada Surface Freight Classification: ?

IMDG: TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS DIALLYL DISULFIDE), 6.1, UN2810, III, ERG GUIDE 153

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	3 Health	0 Least	3 Health
	2 Flammability	1 Slight	2 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>Y</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>Y</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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