



# Safety Data Sheet

Issue Date: 11-Nov-2010

Revision Date: 06-Apr-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name **Quali-Pro 3-D**

### Other means of identification

SDS # ADAMA-136

Registration Number(s) Reg. No. 66222-225  
UN/ID No UN3082

### Recommended use of the chemical and restrictions on use

Recommended Use EPA registered insecticide.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)  
3120 Highwoods Blvd., Suite 100  
Raleigh, NC 27604

### Emergency Telephone Number

Company Phone Number 1-919-256-9300  
Emergency Telephone (24 hr) For fire, spill and/or leak contact INFOTRAC:  
1-800-535-5053 (North America) 1-352-323-3500 (International)  
For medical emergencies and health/safety inquiries, contact PROSAR:  
1-877-250-9291

## 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

**Appearance** Clear amber liquid

**Physical State** Liquid

**Odor** Typical phenoxy herbicide odor

### Classification

|                                   |            |
|-----------------------------------|------------|
| Acute toxicity - Oral             | Category 4 |
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization                | Category 1 |
| Carcinogenicity                   | Category 2 |

### Signal Word

**Danger**

**Hazard Statements**

Harmful if swallowed  
 Causes skin irritation  
 Causes serious eye damage  
 May cause an allergic skin reaction  
 Suspected of causing cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a poison center or doctor/physician  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash it before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth  
 Do not induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                                  | CAS No     | Weight-%    |
|--|------------|-------------|
| 2,4-D Amine                                    | 2008-39-1  | 29.64-31.48 |
| Mecoprop-p, DMA Salt                           | 32351-70-5 | 7.76-8.58   |
| (R)-2-(4-Chloro-2-methylphenoxy)propionic acid | 16484-77-8 | 5-10        |
| Dimethylamine                                  | 124-40-3   | 3.90-4.31   |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST-AID MEASURES

### First Aid Measures

|                       |  |
|-----------------------|--|
| <b>General Advice</b> | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.   |
| <b>Eye Contact</b>    | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.                                   |
| <b>Skin Contact</b>   | In case of contact, wash skin thoroughly with soap and water. Remove any contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.   |
| <b>Inhalation</b>     | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek medical attention for further treatment. |
| <b>Ingestion</b>      | Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention. If conscious, give 1 glass of water to dilute. Never give anything by mouth to an unconscious person.   |

### Most important symptoms and effects

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. |
|-----------------|---|

### Indication of any immediate medical attention and special treatment needed

|                           |  |
|---------------------------|--|
| <b>Notes to Physician</b> | Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage. |
|---------------------------|--|

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray (fog). Foam.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

Not determined.

**Hazardous Combustion Products** Oxides of nitrogen. Ammonia. Chlorine compounds. Other unidentified toxic and/or irritating compounds. Hydrogen chloride. Carbon monoxide. Asphyxiants.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

|                             |  |
|-----------------------------|--|
| <b>Personal Precautions</b> | Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. |
|-----------------------------|--|

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

#### **Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material.

**Methods for Clean-Up** Collect and reuse if possible. Absorb with inert material and then place in suitable container for chemical waste. Wash down area and collect water for disposal. Clean up in accordance with all applicable regulations.

## **7. HANDLING AND STORAGE**

#### **Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Follow all product label instructions. Use only as directed. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store at ambient conditions. Do not contaminate water, food, or feed by storage or disposal. Store locked up. Keep/store only in original container. Keep from freezing. Protect container from physical damage. Store in accordance with all state, local, and federal regulations.

**Packaging Materials** Do not reuse container.

**Incompatible Materials** Strong oxidizing agents. Acids.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Exposure Guidelines**

| <b>Chemical Name</b>      | <b>ACGIH TLV</b>           | <b>OSHA PEL</b>  | <b>NIOSH IDLH</b>   |
|---------------------------|----------------------------|--|---|
| Dimethylamine<br>124-40-3 | STEL: 15 ppm<br>TWA: 5 ppm | TWA: 10 ppm<br>TWA: 18 mg/m <sup>3</sup><br>(vacated) TWA: 10 ppm<br>(vacated) TWA: 18 mg/m <sup>3</sup> | IDLH: 500 ppm<br>TWA: 10 ppm<br>TWA: 18 mg/m <sup>3</sup> |

#### **Appropriate engineering controls**

**Engineering Controls** THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS OF END USE PRODUCTS CONTAINING THIS MATERIAL, CONSULT THE SDS OR PRODUCT LABEL FOR THE END USE PRODUCT.

**Individual protection measures, such as personal protective equipment**

|                                       |  |
|---------------------------------------|--|
| <b>Eye/Face Protection</b>            | Use splash goggles or face shield when contact may occur.  |
| <b>Skin and Body Protection</b>       | Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.  |
| <b>Respiratory Protection</b>         | Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.  |
| <b>General Hygiene Considerations</b> | Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. |

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                                     |                          |                         |                                |
|-------------------------------------|--------------------------|-------------------------|--------------------------------|
| <b>Physical State</b>               | Liquid                   | <b>Odor</b>             | Typical phenoxy herbicide odor |
| <b>Appearance</b>                   | Clear amber liquid       | <b>Odor Threshold</b>   | Not determined                 |
| <b>Color</b>                        | Clear amber              | <b>Remarks • Method</b> |                                |
| <b>Property</b>                     | <b>Values</b>            |                         |                                |
| <b>pH</b>                           | 8.5-9.0 (neat)           |                         |                                |
| <b>Melting Point/Freezing Point</b> | Not determined           |                         |                                |
| <b>Boiling Point/Boiling Range</b>  | 100 °C / 212 °F          |                         |                                |
| <b>Flash Point</b>                  | Does not flash           |                         |                                |
| <b>Evaporation Rate</b>             | Lower than butyl acetate | (butyl acetate = 1)     |                                |
| <b>Flammability (Solid, Gas)</b>    | Liquid-not applicable    |                         |                                |
| <b>Upper Flammability Limits</b>    | None established         |                         |                                |
| <b>Lower Flammability Limit</b>     | None established         |                         |                                |
| <b>Vapor Pressure</b>               | 0.021 mmHg               |                         |                                |
| <b>Vapor Density</b>                | Not determined           |                         |                                |
| <b>Specific Gravity</b>             | Not determined           |                         |                                |
| <b>Water Solubility</b>             | Miscible in water        |                         |                                |
| <b>Solubility in other solvents</b> | Not determined           |                         |                                |
| <b>Partition Coefficient</b>        | Not determined           |                         |                                |
| <b>Auto-ignition Temperature</b>    | Not determined           |                         |                                |
| <b>Decomposition Temperature</b>    | Not determined           |                         |                                |
| <b>Kinematic Viscosity</b>          | Not determined           |                         |                                |
| <b>Dynamic Viscosity</b>            | Not determined           |                         |                                |
| <b>Explosive Properties</b>         | Not determined           |                         |                                |
| <b>Oxidizing Properties</b>         | Not determined           |                         |                                |
| <b>Density</b>                      | 1.13 g/mL                |                         |                                |
| <b>Bulk Density</b>                 | 9.42 lb/gal              |                         |                                |

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions. However, may decompose if heated.

**Possibility of Hazardous Reactions**

None under normal processing.

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Hazardous Polymerization</b> | Material is not known to polymerize. |
|---------------------------------|--------------------------------------|

**Conditions to Avoid**

See Sec. 7 Handling &amp; Storage.

**Incompatible Materials**

Strong oxidizing agents. Acids.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx). Ammonia. Chlorine compounds. Other potentially hazardous fumes. Hydrogen chloride. Incomplete combustion may produce monoxide and other asphyxiates.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

|                     |                                  |
|---------------------|----------------------------------|
| <b>Eye Contact</b>  | Causes serious eye damage.       |
| <b>Skin Contact</b> | Causes skin irritation.          |
| <b>Inhalation</b>   | Avoid breathing vapors or mists. |
| <b>Ingestion</b>    | Harmful if swallowed.            |

**Component Information**

| Chemical Name  | Oral LD50            | Dermal LD50             | Inhalation LC50        |
|--|----------------------|-------------------------|------------------------|
| 2,4-D Amine<br>2008-39-1                                     | = 625 mg/kg ( Rat )  | = 2115 mg/kg ( Rabbit ) | -                      |
| (R)-2-(4-Chloro-2-methylphenoxy)propionic acid<br>16484-77-8 | = 1050 mg/kg ( Rat ) | > 4 g/kg ( Rat )        | -                      |
| Dimethylamine<br>124-40-3                                    | = 698 mg/kg ( Rat )  | = 3900 mg/kg ( Rat )    | = 4540 ppm ( Rat ) 6 h |

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause an allergic skin reaction.

**Carcinogenicity** Suspected of causing cancer.

| Chemical Name  | ACGIH | IARC     | NTP | OSHA |
|--|-------|----------|-----|------|
| (R)-2-(4-Chloro-2-methylphenoxy)propionic acid<br>16484-77-8 |       | Group 2B |     | X    |

**Legend**

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Numerical measures of toxicity**

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to aquatic life with long lasting effects. This product is toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

### Component Information

| Chemical Name             | Algae/aquatic plants                              | Fish   | Toxicity to microorganisms | Crustacea                                 |
|---------------------------|---|--|----------------------------|---|
| Dimethylamine<br>124-40-3 | 9: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 111 - 125: 96 h<br>Oncorhynchus mykiss mg/L<br>LC50 120: 96 h<br>Oncorhynchus mykiss mg/L<br>LC50 static 210: 96 h<br>Poecilia reticulata mg/L<br>LC50 static 127 - 349: 96 h<br>Poecilia reticulata mg/L<br>LC50 semi-static 396: 96 h<br>Brachydanio rerio mg/L<br>LC50 static | EC50 = 26.8 mg/L 15 min    | 88.7: 48 h Daphnia magna Straus mg/L EC50 |

### Persistence/Degradability

Not determined.

### Bioaccumulation

Not determined.

### Mobility

| Chemical Name             | Partition Coefficient |
|---------------------------|-----------------------|
| Dimethylamine<br>124-40-3 | -0.274                |

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

#### **Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### US EPA Waste Number

| Chemical Name             | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------|------|--------------------------|------------------------|------------------------|
| 2,4-D Amine<br>2008-39-1  | U240 |                          |                        | U240                   |
| Dimethylamine<br>124-40-3 |      |                          |                        | U092                   |

**California Hazardous Waste Status**

| Chemical Name             | California Hazardous Waste Status |
|---------------------------|-----------------------------------|
| Dimethylamine<br>124-40-3 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION**

|                             |   |
|-----------------------------|---|
| <b>Note</b>                 | Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. |
| <b>DOT</b>                  | Package size <35 gallons is not regulated by D.O.T. ground  |
| <b>UN/ID No</b>             | UN3082  |
| <b>Proper Shipping Name</b> | Environmentally Hazardous Substance, Liquid, N.O.S. (2,4-dichlorophenoxyacetic acid)  |
| <b>Hazard Class</b>         | 9   |
| <b>Packing Group</b>        | III   |
| <b>IATA</b>                 | Not regulated   |
| <b>IMDG</b>                 |   |
| <b>Marine Pollutant</b>     | This material may meet the definition of a marine pollutant   |

**15. REGULATORY INFORMATION****International Inventories**

| Chemical Name                                  | TSCA    | DSL | NDSL | EINECS  | ELINCS | ENCS    | IECSC | KECL    | PICCS | AICS |
|--|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| 2,4-D Amine                                    |         |     |      | Present |        |         | X     |         | X     | X    |
| Mecoprop-p, DMA Salt                           |         |     |      | Present |        |         | X     |         |       |      |
| (R)-2-(4-Chloro-2-methylphenoxy)propionic acid |         |     |      | Present |        |         |       |         |       |      |
| Dimethylamine                                  | Present | X   |      | Present |        | Present | X     | Present | X     | X    |

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations****CERCLA**

| Chemical Name             | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                  |
|---------------------------|--------------------------|----------------|---|
| 2,4-D Amine<br>2008-39-1  | 100 lb                   |                | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ |
| Dimethylamine<br>124-40-3 | 1000 lb                  |                | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |



**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute Health Hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire Hazard</b>                       | No  |
| <b>Sudden Release of Pressure Hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name            | CAS No   | Weight-%  | SARA 313 - Threshold Values % |
|--------------------------|----------|-----------|-------------------------------|
| Dimethylamine - 124-40-3 | 124-40-3 | 3.90-4.31 | 1.0                           |

**CWA (Clean Water Act)**

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Dimethylamine | 1000 lb                     |                        |                           | X                          |

**US State Regulations****U.S. State Right-to-Know Regulations**

| Chemical Name             | New Jersey | Massachusetts | Pennsylvania |
|---------------------------|------------|---------------|--------------|
| Dimethylamine<br>124-40-3 | X          | X             | X            |

**EPA Pesticide Registration Number** Reg. No. 66222-225**EPA Statement**

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label**

Signal Word: Danger

Corrosive. Causes irreversible eye damage. Do not get in eyes or on skin or clothing. Harmful if swallowed.

**Difference between SDS and EPA pesticide label**

|                                   | EPA                            | OSHA                                |
|-----------------------------------|--------------------------------|-------------------------------------|
| <b>Signal Word</b>                | Danger                         | Danger                              |
| Acute toxicity - Oral             | Harmful if swallowed           | Harmful if swallowed                |
| Skin corrosion/irritation         | N/A                            | Causes skin irritation              |
| Serious eye damage/eye irritation | Causes irreversible eye damage | Causes serious eye damage           |
| Skin sensitization                | N/A                            | May cause an allergic skin reaction |

**16. OTHER INFORMATION**

|                    |                       |                     |                         |                            |
|--------------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b><u>NFPA</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|                    | 3                     | 0                   | 0                       | Not determined             |
| <b><u>HMIS</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical Hazards</b> | <b>Personal Protection</b> |
|                    | 3                     | 0                   | 0                       | H                          |

**Issue Date:** 11-Nov-2010  
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**Revision Note:** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**