1. PRODUCT IDENTIFICATION

Product identifier on label: QUADRIS® FLOWABLE
Product No.: A12705A
Use: Fungicide
Manufacturer: Syngenta Crop Protection, LLC
            Post Office Box 18300
            Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481
Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Not Applicable
Signal Word (OSHA): Not Applicable
Hazard Statements: Not Applicable

Precautionary Statements: Not Applicable
Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propanediol</td>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Bentonite</td>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>Other ingredients</td>
<td>Trade Secret</td>
<td>&lt;77.1%</td>
</tr>
<tr>
<td>Methyl (E)-2-[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate</td>
<td>Azoxystrobin</td>
<td>131860-33-8</td>
<td>22.9%</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

**Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Inhalation:** 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

**Most important symptoms/effects:**
- Not Applicable

**Indication of immediate medical attention and special treatment needed:**
- There is no specific antidote if this product is ingested.
- Treat symptomatically.

5. FIRE FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:**
Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

**Specific Hazards:**
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

**Special protective equipment and precautions for firefighters:**
Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:**
Follow exposure controls/personal protection outlined in Section 8.

**Methods and materials for containment and cleaning up:**
Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.
7. HANDLING AND STORAGE

Precautions for safe handling:
Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:
Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>Not Established</td>
<td>Not Established</td>
<td>10 mg/m³ TWA</td>
<td>AIHA</td>
</tr>
<tr>
<td>Bentonite</td>
<td>15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)</td>
<td>10 mg/m³ TWA (inhalable); 3 mg/m³ TWA (respirable)</td>
<td>Not Established</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Azoxystrobin</td>
<td>Not Established</td>
<td>Not Established</td>
<td>4 mg/m³ TWA</td>
<td>Syngenta</td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:
Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:
Where eye contact is likely, use chemical splash goggles.

Skin Contact:
Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:
A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.
9. PHYSICAL AND CHEMICAL PROPERTIES

   Appearance:  Off-white to yellow-orange suspension
   Odor:       Not determined
   Odor Threshold:  Not Available
   pH:          7
   Melting point/freezing point:  Not Applicable
   Initial boiling point and boiling range:  Not Available
   Flash Point (Test Method):  Does not flash
   Flammable Limits (% in Air):  Not Available
   Flammability:  Not Applicable
   Vapor Pressure:  Azoxystrobin  8.25 x 10^-13 mmHg @ 68°F (20°C)
   Vapor Density:  Not Available
   Relative Density:  1.096 g/ml
   Solubility (ies):  Azoxystrobin  6 mg/l in water @ 68°F (20°C)
   Partition coefficient:  n-octanol/water:  Not Available
   Autoignition Temperature:  Not Available
   Decomposition Temperature:  Not Available
   Viscosity:  Not Available
   Other:  None

10. STABILITY AND REACTIVITY

   Reactivity:  Not reactive.
   Chemical stability:  Stable under normal use and storage conditions.
   Possibility of hazardous reactions:  Will not occur.
   Conditions to Avoid:  None known.
   Incompatible materials:  None known.
   Hazardous Decomposition Products:  None known.

11. TOXICOLOGICAL INFORMATION

   Health effects information
   Likely routes of exposure:  Dermal, Inhalation
   Symptoms of exposure:  Not Applicable
   Delayed, immediate and chronic effects of exposure:  Not Applicable
   Numerical measures of toxicity (acute toxicity/irritation studies (finished product))
   Ingestion:  Oral (LD50 Rat):  > 5000 mg/kg body weight
Reproductive/Developmental Effects
Azoxystrobin: Did not show reproductive toxicity effects in animal experiments.

Chronic/Subchronic Toxicity Studies
Azoxystrobin: No adverse effect has been observed in chronic toxicity tests.

Carcinogenicity
Azoxystrobin: Did not show carcinogenic effects in animal experiments.

Chemical Name | NTP/IARC/OSHA Carcinogen
--- | ---
1,2-Propanediol | No
Bentonite | No
Other ingredients | No
Methyl (E)-2-{2-[6-(2-cyanophenoxy)pyrimidin-4-yl]oxy}phenyl)-3-methoxyacrylate | No

Other Toxicity Information
None

Toxicity of Other Components
Bentonite
Prolonged inhalation of excessive concentrations of dust may lead to lung injury.

Other ingredients
Not Applicable

Propylene Glycol
Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Target Organs
Active Ingredients
Azoxystrobin: Liver

Inert Ingredients
Bentonite: Respiratory tract
Propylene Glycol: CNS, kidney, liver
12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity
Azoxystrobin:
- Fish (Rainbow Trout) 96-hour LC50 470 ppb
- Green Algae 5-day EC50 106 ppb
- Invertebrate (Water Flea) 48-hour EC50 259 ppb
- Bird (Mallard Duck) 14-day LD50 > 250 mg/kg

Environmental Fate
Azoxystrobin:
The information presented here is for the active ingredient, azoxystrobin.

13. DISPOSAL CONSIDERATIONS

Disposal:
Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: None

14. TRANSPORT INFORMATION

DOT Classification
Ground Transport - NAFTA
Not regulated

Comments
Water Transport - International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

Air Transport
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin)
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:
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:
QUADRIS® FLOWABLE

Date: 6/16/2015
Replaces: 5/20/2015

Caution: Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks and shoes and chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber.

EPA Registration Number(s):
100-1098

EPCRA SARA Title III Classification:
Section 311/312 Hazard Classes: Acute Health Hazard
Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):
None

RCRA Hazardous Waste Classification (40 CFR 261):
Not Applicable

TSCA Status:
Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Syngenta Hazard Category: A

For non-emergency questions about this product call:
1-800-334-9481

Original Issued Date: 1/30/1997
Revision Date: 6/16/2015
Replaces: 5/20/2015
Section(s) Revised: 2, 4, 7, 11, 16

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.