

# MATERIAL SAFETY DATA SHEET

# BARRIER

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Real Farm Technologies, LLC  
605 12<sup>th</sup> Street  
Aurora, NE 68818

EPA REG. NO.: 86363-5-89286

PRODUCT NAME: BARRIER  
CHEMICAL NAME: Tebuconazole, alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1 H-1,2,4-triazole-1-ethanol  
CHEMICAL FAMILY: Fungicide

Hotline Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION:** Causes moderate eye irritation. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor or spray mist.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Tebuconazole	38.7	107534-96-3	Not listed
Inert Ingredients, including Glycerin	61.3	56-81-5	For Glycerin Mist Total Dust = 15ppm Respirable Fraction = 5ppm

## 4. FIRST AID MEASURES

**If swallowed:** Call a poison control center or doctor immediately for treat 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 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 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 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. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**Note To Physician:** No specific antidote. Treat symptomatically

**Symptoms of Poisoning:** The compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT** (<sup>o</sup>F/Test Method): >200°F

**FLAMMABLE LIMITS** (LFL & UFL): Not established

**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, water spray or fog.

**HAZARDOUS COMBUSTION PRODUCTS:** Toxic fumes may be emitted in a fire situation.

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Containers may expand and burst at elevated temperatures. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).

**HAZARDOUS COMBUSTION PRODUCTS:** may produce oxides of carbon or nitrogen.

## 6. ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state and federal

regulations for proper disposal. **NOTE:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water. Always wear proper protective equipment when working with the product.

**7. HANDLING AND STORAGE**

**HANDLING:** Wash hands after handling, and 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 place. Keep out of reach of children and animals. Store in original containers only. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**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.

**RESPIRATORY PROTECTION:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**EYE PROTECTION:** Wear chemical goggles or shielded safety glasses when handling and mixing product.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes plus socks and chemical-resistant gloves. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

**Personal Protective Equipment (PPE):** Wear long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate, or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton, and shoes plus socks. Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Opaque, aqueous suspension

**SPECIFIC GRAVITY** (Water=1): 1.07 – 1.17 g/ml

**VAPOR PRESSURE:** Not established

**VAPOR DENSITY:** Not established

**PERCENT VOLATILE** (by volume): Not established

**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.

**SOLUBILITY:** Miscible      **pH:** 7.5

**BULK DENSITY:** 8.92 – 9.75 lbs/gal.

**BOILING POINT:** Not established

**VISCOSITY:** Not established

**EVAPORATION RATE:** Not established

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable under proper storage conditions.

**CONDITIONS TO AVOID:** Direct sunlight and extreme temperatures, both high and low.

**IMCOMPATIBILITY:** None Known

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May emit oxides of carbon and nitrogen.

**11. TOXICOLOGICAL INFORMATION**

Based on a similar formulation

**Acute Oral LD<sub>50</sub>:** >3,500 & <5,000 mg/kg

**Eye Irritation:** Causes mild irritation

**Inhalation LC<sub>50</sub>:** >0.53 mg/L(Female) - >2.50 mg/L

**Carcinogenic Potential:** None listed in OSHA, NTP, IARC, or ACGIH

**Acute Dermal LD<sub>50</sub>:** >2,000 mg/kg (Rat)

**Skin Irritation:** May cause slight irritation

**Skin sensitization:** Not a contact sensitizer

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

This pesticide is toxic to estuarine and marine invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

# MATERIAL SAFETY DATA SHEET

# BARRIER

## 14. TRANSPORT INFORMATION

DOT Shipping Description: Not Regulated

DOT HAZARD CLASS: None

UN NUMBER: None DOT PACKING GROUP: None

DOT PRIMARY/SECONDARY LABEL: None

DOT PRIMARY/SECONDARY PLACARD: None

## 15. REGULATORY INFORMATION

NFPA RATINGS: Least = 0 Slight = 1 Moderate = 2 High = 3 Severe = 4

Ratings for this product: Health – 1 Flammability – 1 Instability – 1 Special Hazards – None Specified

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

Reportable Quantity (RQ) under U.S. CERCLA: None

SARA, Title III, Section 313: None

CA Proposition 65: Not Listed

## 16. OTHER

Date of Issue: 01/09/13 Supersedes: New

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and manufacturer, seller and distributor, disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.