1. IDENTIFICATION

Product name: Product type: EPA Registration No.:	STROBE 50 WG Fungicide 53883-343				
Chemical name of active ingredient(s):	Azoxystrobin: Methyl (<u>E</u>)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate				
Manufacturer/Registrant:	Control Solutions, Inc. 5903 Genoa-Red Bluff Pasadena, TX 77507				
For fire, spill, and/or leak emergencies, contact	Phone: 1 200 424 0200				
Chemtrec: For medical emergencies and health and safety	Phone: 1-800-424-9300				
inquiries, contact Safety Call:	Phone: 1-866-897-8050				
Poison Control Center	Phone: 1-800-222-1222				

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
Category	NC	NC	NC	NC	NC	NC

NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

- May cause damage to organs through prolonged or repeated exposure. (STOT-RE - Category 2)

PICTOGRAM:



PRECAUTIONARY STATEMENTS:

- Do not breathe dust, fume, gas, mist, vapor or spray. Get medical advice if you feel unwell.

Contact Safety Call[®] International for emergency medical treatment at (866) 897-8050.

PHYSICAL OR CHEMICAL HAZARDS: Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

STORAGE AND DISPOSAL: See Section 7 and 13.

OTHER HAZARDS: See Section 11 and 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Azoxystrobin	131860-33-8	50	NA	NA	NA	NA
Phenol	108-95-2	< 3	5 ppm 19 mg/m ³ (TWA)	5 ppm (TWA)	NA	IARC – 3*

Calcium carbonate	1317-65-3	< 23	15 mg/m ³ (TWA total dust) 5 mg/m ³ (TWA	10 mg/m ³ (Total dust)	NA	NA
			Respirable dust)			

NE=Not established; NA=Not applicable.

* IARC – 3 Not classifiable as to its carcinogenicity to humans.

4. FIRST AID MEASURES

FIRST AID						
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. 					
	• Do not induce vomiting unless told to do so by the poison control center or doctor.					
	 Do not give any liquid to the person. 					
	 Do not give anything by mouth to an unconscious person. 					
IF ON SKIN OR	Take off contaminated clothing.					
CLOTHING:	 Rinse skin immediately with plenty of water for 15-20 minutes. 					
	 Call a poison control center or doctor for treatment advice. 					
IF IN EYES:	Hold eye open and rinse slowly and gently with water 15-20 minutes.					
	• Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.					
	Call a poison control center or doctor for treatment advice.					
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.						
You may also contact SafetyCall [®] International for emergency medical treatment at (866) 897-8050.						

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable.

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water spray, CO₂, foam, dry chemical.

FIRE & EXPLOSION HAZARDS: Fire will spread by burning with flame. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

FIRE-FIGHTING PROCEDURES: Use appropriate extinguishing media for combustibles in the area. 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. Prevent use of contaminated buildings, are and equipment decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition or combustion.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage system or any body of water. In case of spill on floor or paved surfaces, cover spill with moist sand, soil, or sawdust. Transfer to container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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 CONSULT THE PRODUCT LABEL.

HAND PROTECTION: Chemical-resistant gloves.

SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks.

EYE PROTECTION: Protective eyewear or chemical safety glasses with side shields or chemical goggles when working in non-ventilated spaces.

RESPIRATOR REQUIREMENTS: For most conditions, no respiratory protection should be needed; however, if handling without sufficient ventilation, use NIOSH approved air-purifying respirator with any R, P or HE filter.

VENTILATION: Whenever possible, adequate ventilation should be used to minimize the need for personal protective equipment.

ADDITIONAL PROTECTIVE MEASURES:

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

USER SAFETY RECOMMENDATIONS:

Users Should:

- 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.

EXPOSURE GUIDELINES: Refer to Section 3.

ENGINEERING CONTROLS: Refer to product label. Minimize airborne concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid (granular)

ODOR: Not available

pH: 9.7 @25°C

FLASH POINT: Not applicable

DENSITY: 0.59 g/ml @25°C(pour); 0.644 g/ml @25°C(tap)

VISCOSITY: Not applicable

MELTING POINT: Not available

SOLUBILITY: Not available

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Avoid strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Reproductive/Developmental Effects:

Azoxystrobin: Shows weak chromosomal damage in mammalian cells at cytotoxic levels. Negative in whole animal assays for chromosomal and DNA damage at high dosages (\geq 2,000 mg/kg). In rabbits, no effect was observed up to the highest dose level (500 mg/kg/day). In rats, developmental effects were seen only at maternally toxic doses (100 mg/kg/day).

Chronic/Subchronic Toxicity Studies :

Azoxystrobin: In a rat 90-day feeding study, liver toxicity was observed at 2,000 ppm. This was manifest asgross distension of the bile duct, increased numbers of lining cells and inflammation of the duct. No toxicologically significant effects were seen in repeat dose dog studies. Data reviews do not indicate any potential for endocrine disruption. There is no evidence of neurotoxicity in any of the studies conducted with azoxystrobin.

Carcinogenicity:

Azoxystrobin: No carcinogenic effects observed in rats or mice at doses up to the maximum tolerated dose.

Target Organs:

Azoxystrobin: Liver. Other ingredient: Phenol: May cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Azoxystrobin is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer.

Do not apply directly to water, or 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 washwater or rinsate.

ECO-ACUTE TOXICITY: (Based on azoxystrobin data)

Fish (Rainbow Trout) 96-hour LC₅₀: 470 ppb Birds (Mallard Duck) 14-day LC₅₀: > 250 mg/kg body weight Green Algae 5-day EC₅₀ : 106 ppb Invertebrates (*Daphnia magna*) 48-hour EC₅₀: 259 ppb

ENVIRONMENTAL FATE: The active ingredient, azoxystrobin, has a low bioaccumulation potential, low to moderate mobility in soil, but is moderately persistent to persistent in soil or water. The dissipation half-life in soil is 54 - 135 days and in water it is 187 - 239 days. Under field conditions the half-life in soil is 14 days. The main routes of degradation are by microbial degradation, hydrolysis, and formation of bound residues.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spilled bait, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

Ground Domestic (DOT):

Not regulated.

Vessel (IMDG): UN3077, Environmentally Hazardous substances, solid, n.o.s. (azoxystrobin), 9, PG III,

Marine Pollutant

Air (IATA): UN3077, Environmentally Hazardous substances, solid, n.o.s. (azoxystrobin), 9, PG III

15. REGULATORY INFORMATION

FIFRA INFORMATION:

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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION Harmful if swallowed, and absorbed through skin. Causes moderate eye irritation. 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.

SARA TITLE III CLASSIFICATION:

Section 302: Phenol (CAS No. 108-95-2) Section 311/312: Acute health hazard (immediate) Chronic health hazard (delayed) Section 313: Phenol (CAS No. 108-95-2)

CA PROPOSITION 65: Not applicable

CERCLA RQ: Phenol (CAS No. 108-95-2) RQ=1,000 lbs.

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

STATE RIGHT TO KNOW: Phenol (CAS#: 108-95-2)- MA, PA and NJ

16. OTHER INFORMATION				
HAZARD RATINGS	NFPA	HMIS		
HEALTH:	1	1	0	MINIMAL
FLAMMABILITY:	0	0	1	SLIGHT
REACTIVITY:	0	0	2	MODERATE
			3	HIGH
			4	SEVERE

MSDS DATE: 1-10-2014.

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