Revision date: 2015/06/26 Version: 1.0 Page: 1/7

1. Product and Company Identification

Company OAT Agrio Co., Ltd. 1-3-1 Kanda Ogawa-machi, Chiyoda-ku, Tokyo, 101-0052 Japan	Emergency Response Information +81-3-5283-0256 (Business Development Division, Japan)
(Product number) SDS number: Recommended use:	OAT0143E-5US Curative, contact fungicide for control of powdery mildew
EPA Reg. No.	11581-2

2. Hazards Identification

GHS Classification: Health hazards Acute toxicity (Oral) Acute toxicity (Dermal) Acute toxicity (Inhalation) Skin corrosion/irritation Serious eye damage/irritation Skin sensitization: Respiratory Sensitization	Category 5 Not classified Not classified Not classified Not classified Not classified Not classified	
Germ Cell Mutagenicity	Not classified	
Carcinogenicity	Not classified Not classified	
Reproductive Toxicity Specific Target Organ Toxicity	Not classified	
(Single Exposure)	Not classified	
Specific Target Organ Toxicity		
(Repeated or Prolonged Exposure)	Not classified	
Aspiration Hazard	Not classified	
Physical hazards		
Éxplosives	Not classified	
Flammable Gases	Not applicable	
Flammable Aerosols	Not applicable	
Oxidizing Gases	Not applicable	
Gases under Pressure	Not applicable	
Flammable Liquids	Not applicable	
Flammable Solids	Not classified	
Self-Reactive Chemicals	Not classified	
Pyrophoric Liquids	Not applicable	
Pyrophoric Solids	Not classified	
Self-Heating Chemicals	Not classified	Next stars off a 1
Chemicals Which, In Contact with Water, Emit Fla		Not classified
Oxidizing Liquids	Not applicable	
Oxidizing Solids	Not classified Not classified	
Organic Peroxides Corrosive to Metals	Not classified	
	not classified	

Revision date: 2015/06/26 Version: 1.0 Page: 2/7

GHS label elements Symbol Signal words Hazard statements Precautionary statements Response Call a POISON CENTER or doc	No symbol Warning May be harmful if swallowed H303 tor/physician if you feel unwell. (P312)	
Hazards Not Otherwise Classified (HNOC): None known		
3. Composition / Information on Ingredients Substance/mixture : Mixure		

Ingredient name	CAS Number	Composition (%)
Potassium hydrogencarbonate	298-14-6	82
Surfactants and others	Trade secret	18

4. First-Aid Measures

If inhaled:

Move 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.

If on skin:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison center or doctor for treatment advice. Launder clothing before reuse.

If in eyes:

Immediately flush eyes with copious amounts of water for at least 15 minutes. Get medical attention.

If swallowed:

Call a poison control center 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 the poison control center or doctor. Do not give anything to an unconscious person.

5. Fire-Fighting Measures

Extinguishing Media:

Foam, dry chemical, dry sand or carbon dioxide

Specific Hazards:

Give off carbon dioxide if heated to decomposition.

Specific fire-fighting measures:

In fire situations involving the surrounding area, cool the product down with plenty of water. Move container to safe place if you can do it without risk.

Revision date: 2015/06/26 Version: 1.0

Protection of fire-fighters:

Wear full fire-fighting turnout gear (full bunker gear) and respiratory protection (self-contained breathing apparatus).

6. Accidental release measures

Personal precautions:

Wear appropriate personal protective equipment (refer to Section 8) during clean-up. Avoid contact with eyes and skin. Avoid inhalation of dust.

Environmental precautions:

Avoid entry into the water way.

Cleanup:

Shut off all sources of ignition. Avoid raising dust. Sweep up, place in a solid waste containers for later disposal. Mop area with water after material has been picked up.

7. Handling and Storage

Handling

Handle with appropriate personal protective equipment (refer to Section 8) under ventilation. Avoid contact with eyes and skin. Avoid inhalation of dust. Avoid prolonged or repeated exposure. Avoid raising dust.

Do not eat or smoke while handling. Wash hands thoroughly after handling.

Storage

Store in a cool place. Keep tightly closed. Keep all foods in separate area away. Store in a place that is inaccessible to children.

8. Exposure Controls and Personal Protection

Engineering measures:

Mechanical exhaust and/or local exhaust are necessary.

Control parameters:

There is no TLV specified by ACGIH. (ACGIH) Particles Not Otherwise Specified OSHA 1910.1000 Table Z-3 Inert or Nuisance Dust Respirable Fraction: 5 mg/m3 Total dust: 15 mg/m3

<u>Personal protective equipment</u> RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Revision date: 2015/06/26 Version: 1.0

Respiratory protection:

Wear respirator which is approved or made according to a standard approved by the relevant national body for health and safety.

Hand protection:

Rubber gloves

Eye protection:

Safety goggles

Skin and body protection:

Long-sleeved shirt and long pants and shoes plus socks

General safety and hygiene measures:

Wash thoroughly after handling. Launder clothing before reuse. Follow good industrial hygiene practices for ventilation and clean up.

9. Physical and Chemical Properties

Appearance: Form: Color: Odor:	Powder Like white Odorless
Odor threshold: pH value: Melting temperature: Boiling temperature: Decomposition temperature:	Not known or applicable 8.5 Not applicable/Active ingredient Not applicable/Active ingredient Start at 100°C, and decompose into potassium carbonate, carbon dioxide and water at 200°C. /Active ingredient
Flash point: Auto ignition temperature: Evaporation rate: Explodability Vapor pressure: Vapor density: Bulk density: Partitioning coefficient	Not flammable Not determined Not applicable Not explosive Not applicable/Active ingredient Not determined 0.55
n- octanol/water(log Pow): Solubility in water: Other data: Explosion limit:	Not determined 600 g/L (60°C)/Active ingredient Not determined

10. Stability and Reactivity

Stability:

This product is stable under normal condition of handling and storage.

Conditions to avoid:

Avoid store in high temperature.

Revision date: 2015/06/26 Version: 1.0

Materials to avoid:

Oxidizing agents

Hazardous decomposition products:

This product is decomposed at above 100°C, and generate harmful gas such as carbon dioxide.

11. Toxicological information

Acute toxicity Oral: Dermal:	LD ₅₀ : 3822 mg/kg (Male rats), 2931 LD ₅₀ : >2020 mg/kg (Rabbits)	mg/kg (Female rats)
Skin corrosion/irritation:	Mild irritation (Rabbits)	
Serious eye damage/eye irritation:	Minimal irritation (Rabbits)	
Skin sensitization: Routes of exposure:	Negative (Guinea-pigs)	
CarcinogenicityNational Toxicology Program (NTP) Report on CarcinogensNot listedInternational Agency for Research on Cancer (IARC)Not listedOSHA Specified CarcinogenNot listed		Not listed

12. Ecological Information

Aquatic toxicity: Not available

13. Disposal considerations

Do not apply directly to water, or to area where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Pesticide disposal:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container disposal:

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then dispose of empty bag, by recycling if available, or in a sanitary landfill, or by incineration or, if allowed by State and local authorities, by burning. If buried, stay out of smoke.

14. Transport Information

Specific safety measures and conditions on transport:

The cautions which should be taken during transportation are same as the cautions mentioned in Section 7. In case of accidental release or fire during transportation, see the

Revision date: 2015/06/26 Version: 1.0 Page: 6/7

instructions given in Section 5, 6, 7 and 8 above.

UN CLASSIFICATION:	Not applicable
UN NUMBER:	Not applicable

15. Regulatory Information

Other regulatory information

Follow all regulations in your country.

OAT Agrio Co., Ltd. is not able to check up the regulatory information in regard to this product in your country or region. Therefore, we request this matter would be filled by your responsibility.

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels or non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using toilet. Remove contaminated clothing and wash clothing before reuse.

16. Other Information

Reference

OAT Agrio's published and unpublished data.

This Safety Data Sheet is prepared based on a limited source of OAT Agrio's data and available references.

This Safety Data Sheet is being furnished to the immediate purchaser of the material to which it refers without representation or warranty as to the completeness or accuracy of any information or recommendations contained herein.

This Safety Data Sheet is not intended to create any liability of any kind on the part of OAT Agrio Company Limited.

This Safety Data Sheet is furnished upon the express condition that all persons receiving it will make their own determination as to its suitability for their purposes prior to use as well as its suitability for actual conditions under which the product will be used, processed, transported or deposited.

This Safety Data Sheet is furnished also upon the express condition that OAT Agrio Company Limited shall be indemnified and held harmless by the purchaser, user, transporter and keeper of the material from any damage, loss or expense suffered from any claims of third parties against OAT Agrio Company Limited arising from or in connection with any use, transportation or storage of the material.

Responsibility for compliance with applicable federal, state or local regulations concerning

Revision date: 2015/06/26 Version: 1.0 Page: 7/7

dissemination of the Safety Data Sheet and sale and use of the material to which it refers rests solely upon the purchaser.

SDS Prepared by:

OAT Agrio Co., Ltd. SDS Prepared on: 2015/06/26 END OF DATA SHEET