

Safety Data Sheet

KALIGREEN

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:	OAT0143E-5US
Recommended use:	Curative, contact fungicide for control of powdery mildew

EPA Reg. No.	11581-2
--------------	---------

2. Hazards Identification

GHS Classification:

Health hazards

Acute toxicity (Oral)	Category 5
Acute toxicity (Dermal)	Not classified
Acute toxicity (Inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Skin sensitization:	Not classified
Respiratory Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated or Prolonged Exposure)	Not classified
Aspiration Hazard	Not classified

Physical hazards

Explosives	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
Chemicals Which, In Contact with Water, Emit Flammable Gases	Not classified
Oxidizing Liquids	Not applicable
Oxidizing Solids	Not classified
Organic Peroxides	Not classified
Corrosive to Metals	Not classified

Safety Data Sheet

KALIGREEN

Revision date: 2015/06/26
Version: 1.0

Page: 2/7

GHS label elements

Symbol	No symbol	
Signal words	Warning	
Hazard statements	May be harmful if swallowed	H303
Precautionary statements		
Response		
Call a POISON CENTER or doctor/physician if you feel unwell. (P312)		

Hazards Not Otherwise Classified (HNOC): None known

3. Composition / Information on Ingredients

Substance/mixture : Mixture

<u>Ingredient name</u>	<u>CAS Number</u>	<u>Composition (%)</u>
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.

Safety Data Sheet

KALIGREEN

Revision date: 2015/06/26
Version: 1.0

Page: 3/7

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

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Safety Data Sheet

KALIGREEN

Revision date: 2015/06/26
Version: 1.0

Page: 4/7

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

Safety Data Sheet

KALIGREEN

Revision date: 2015/06/26
Version: 1.0

Page: 5/7

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: LD₅₀: 3822 mg/kg (Male rats), 2931 mg/kg (Female rats)

Dermal: LD₅₀: >2020 mg/kg (Rabbits)

Skin corrosion/irritation: Mild irritation (Rabbits)

Serious eye damage/eye irritation: Minimal irritation (Rabbits)

Skin sensitization: Negative (Guinea-pigs)
Routes of exposure:

Carcinogenicity

National Toxicology Program (NTP) Report on Carcinogens

Not listed

International Agency for Research on Cancer (IARC)

Not listed

OSHA Specified Carcinogen

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

Safety Data Sheet

KALIGREEN

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

Safety Data Sheet

KALIGREEN

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