



Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Kaligreen
EPA REGISTRATION NUMBER(S): 11581-2
SYNONYM(S): NA

<u>COMPANY</u>
Otsuka Chemical Co., Ltd. 3-2-27, Ote-dori, Chuo-ku Osaka 540-0021, Japan

<u>EMERGENCY TELEPHONE NUMBERS</u>	
HEALTH EMERGENCY:	SPILL EMERGENCY:
1-866-303-6952, or 1-651-632-8946	1-800-424-9300, or 1-703-527-3887

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	CAS #	Exposure Limits*	% Weight	% Volume
Potassium hydrogencarbonate (Potassium bicarbonate)	298-14-6	<u>TWA</u> ^a OSHA PEL ^b : NA ACGIH TLV ^c : NA NIOSH REL ^d : NA	82	NA
Surfactants, others	NA	<u>TWA</u> OSHA PEL: NA ACGIH TLV: NA NIOSH REL: NA	18	NA

Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

*Source: *Guide to Occupational Exposure Values 2003*, published by ACGIH

^a**TWA**: Time-weighted average exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

^b**OSHA PEL**: Occupational Safety and Health Administration Permissible Exposure Limits.

^c**ACGIH TLV**: American Conference of Governmental Industrial Hygienists, Inc., Threshold Limit Values.

^d**NIOSH REL**: National Institute for Occupational Safety and Health Recommended Exposure Limits.

SECTION 3: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

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
- KEEP OUT OF REACH OF CHILDREN

Acute Health Hazards

Eye: Mildly irritating.

Skin: Non-irritant.

Ingestion: NDA

Inhalation: NDA

Chronic Health Hazards (Including Cancer): NDA

Reproductive and Developmental Toxicity: NDA

SECTION 4: FIRST AID MEASURES

Eyes: Immediately flush with plenty of running water at least 15 minutes and get medical attention if irritation persists.

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

Inhalation: Move victim to fresh air. If person is not breathing, call 9-1-1 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor for treatment 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.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Limits in Air (% by volume):		
	Upper:	NA
	Lower:	NA
Flash Point:		Not combustible
	Method Used:	NA
Autoignition Temperature:		None
LEL/UEL:		None
NFPA Hazard Classification:		
	Health:	1
	Flammability:	0
	Reactivity:	0
	Other:	0
Extinguishing Media:		Dry chemical, sand, water spray or regular foam
Special Fire Fighting Procedures:		None
Hazardous Combustion Products:		None

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PHONE NUMBERS

Exposure Calls (PROSAR): 1-866-303-6952 or 1-651-632-8946 (International)

Spill Calls (CHEMTREC): 1-800-424-9300 or 1-703-527-3887

Pick up spills and place in suitable containers. Mop area with water after material has been picked up.

SECTION 7: HANDLING AND STORAGE

Store in a cool, dry place. Keep all foods in separate area away from product. Keep out of reach of children. Follow label directions carefully. Do not eat or smoke while handling. Wash hands thoroughly after handling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety goggles.

Skin Protection: Long-sleeved shirt, rubber gloves and boots.

Respiratory/Ventilation Requirements: Dust mask or chemical protection mask.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to pale yellow
Odor:	NDA
Physical State:	Powder
pH:	NDA
Boiling Point:	Does not boil
Melting Point:	Does not melt
Freezing Point	NDA
Vapor Pressure:	Does not vaporize
Vapor Density:	Does not vaporize
Bulk Density:	NDA
Specific Gravity:	0.56 g/cm ³ (20/20°C)
Evaporation Rate:	Does not vaporize
Solubility in Water:	Soluble 600 g/liter (60°C, 140°F)
Percent Solids by Weight:	NDA
Percent Volatile:	0%
Volatile Organic Compounds:	NDA
Molecular Weight:	NDA
Viscosity:	NDA

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable
Hazardous Polymerization:	Will not occur
Flash Point:	Not combustible
Flammable Point:	NA
Auto Ignition:	None
Incompatibility With Other Materials:	Do not mix with strong acidic compounds
Decomposition Products:	$\text{KHCO}_3 \rightarrow \text{K}^+ + \text{H}_2\text{O} + \text{CO}_2$

SECTION 11: TOXICOLOGICAL INFORMATION

Acute:

Oral Toxicity: LD₅₀ (rat): 3,358 mg/kg

Dermal Toxicity: NDA

Inhalation Toxicity: NDA

Eye Irritation: NDA

Skin Irritation: NDA

Skin Sensitization: NDA

Subchronic: NDA

Chronic Toxicity: NDA

Carcinogenicity: NDA

Mutagenicity: NDA

Developmental Toxicity: NDA

Reproduction: NDA

Neurotoxicity: NDA

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Organism Toxicity: NDA

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

D.O.T. Shipping Name:	Non-regulated
Technical Shipping Name:	NDA
Packing Group:	NDA
D.O.T. Hazard Class:	NDA
U.N/N.A. Number:	NDA
Product RQ (lbs):	NDA
D.O.T. Label:	NDA
D.O.T. Placard:	NDA
Marine Pollutant:	NDA
IMO :	
IMO Label:	NDA
IMO Placard:	NDA
European Road/Rail:	
Class:	NDA

SECTION 15: REGULATORY INFORMATION

U.S Federal Regulations

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act): All pesticides are governed under FIFRA. Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

CERCLA (Comprehensive Response Compensation, and Liability Act): NA

EPCRA (Emergency Planning and Community Right-to-Know Act) Section 313: None

OSHA (Occupational Safety and Health Administration): This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

RCRA (Resource Conservation and Recovery Act): None

SARA Title III (SUPERFUND Amendments and Reauthorization Act):

Section 302 (EHS) TPQ: None

Section 304 (EHS) RQ: None

Section 311/312 CATEGORIES

1. Immediate (Acute) Health Effects; **YES**
2. Delayed (Chronic) Health Effect; **NO**
3. Fire Hazard; **NO**
4. Sudden Release of Pressure Hazard; **NO**
5. Reactivity Hazard; **NO**

TSCA (Toxic Substance Control Act): This product is exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

State Regulations: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

International Regulations:**EEC Classification:** NDA**Risk Phrases:** NDA**Safety Phrases:** NDA**SECTION 16: OTHER INFORMATION**

Reason for issue:	New MSDS for Otsuka Chemical
Prepared by:	James J. Reilly, Jr.
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Supersedes date:	NA
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The information in this MSDS is based on data available to us as of the issue date given herein, and believed to be correct. Contact Arysta LifeScience North America Corporation at (919) 678-4900 to determine if additional data and information have become available since the issue date.

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