



## Kale Powder

SPECIFICATION			
Product name: Kale Powder			
Botanical Name	Brassica oleracea var. sabellica	Part	Aboveground Part
Origin	China	Source	Plant
<b>Item</b>	<b>Standard</b>	<b>Analysis Method</b>	
Appearance	Fine Green to Yellow Green powder	Visual	
Odor & Taste	Characteristic	Organoleptic	
<b>Typical Analysis</b>			
Particle Size	NLT 95% pass 80 mesh	Sieve analysis	
Loss on drying	≤ 12.0 %	USP 921	
<b>Heavy metals</b>			
Heavy metals	≤ 10ppm	ICP-MS	
Lead (Pb)	≤ 3.0ppm	ICP-MS	
Arsenic (As)	≤ 1.0ppm	ICP-MS	
Cadmium (Cd)	≤ 1.0ppm	ICP-MS	
Mercury (Hg)	≤ 0.1ppm	ICP-MS	
<b>Microorganism</b>			
Total Bacterial Count	<1,000cfu/g	USP 2021	
Coliforms	< 10 mpn/g	USP 2022	
<i>Salmonella</i>	Negative	USP 2022	
<i>E. coli</i>	Negative	USP 2022	
Package	N.W. 25Kgs/fiber drum and two plastic bags inside.		
Shelf life	2 Year When Properly Stored		
Storage	Store in a well-closed container away from moisture and direct sunlight.		

## INGREDIENTS

An ingredient is defined in Directive 2000/13/EC on labelling: "ingredient means any substance including additives, used in the production or preparation of a foodstuff and still present in the finished product although possibly in a modified form" i.e all raw materials to produce the goods.

Please list all ingredients:

Ingredients/material composition	%	Country of origin
Kale Powder	100%	China



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## ORIGIN

Country of origin of the product::China			
Is a manufacturing process available		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Source of the product:		<input type="checkbox"/> Animal	<input checked="" type="checkbox"/> Plant
		<input type="checkbox"/> Mineral origin	<input type="checkbox"/> Synthetic
<b>If animal, please answer the following questions.</b>			
is BSE/TSE free		<input type="checkbox"/> YES	<input type="checkbox"/> NO
Is the manufacturer registered to the European Commission		<input type="checkbox"/> YES	<input type="checkbox"/> NO
Is the health certificate available for a food use		<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>If plant, please answer the following questions.</b>			
Botanical name	Brassica oleracea var. sabellica	Geographical origin	China
Part of the plant	Aboveground Part	Drug extract ratio	-
Harvest method	Manual harvesting	Harvest period:	Spring to Autumn
Is the technical data sheet of the plant raw material available		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Are there any agents responsible for adverse effects		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If yes, please precise:			
Please precise the methods of eliminating risk constituents:			
<b>Could you precise the treatments used on the plant harvesting?</b>			
Irrigation	Fertilizers	Herbicides	Insecticides
Fungicides	Other		
Yes	Yes	Controlled use	Controlled use

<b>Could you precise the treatments /transformations after harvest?</b>			
<input checked="" type="checkbox"/> Decontaminated plant(treatment used:		<input type="checkbox"/> Undecontaminated plant	
<input checked="" type="checkbox"/> Washing	<input checked="" type="checkbox"/> Drying	<input type="checkbox"/> Natural drying:	<input checked="" type="checkbox"/> Artificial drying,specify:
Other:			
<b>If mineral origin, please specify species</b>			
<b>If synerhic, please specify species</b>			

If raw material testing is available, please include the test results. (UV/ TLC /HPLC/ MS/ NMR. )

## GENETICALLY MODIFIED ORGANISMS-GMO

According to EU regulations EC/1829/2003 & EC/1830/2003

According to the EU regulations concerning the traceability and labelling of Genetically Modified Organisms(GMO),and the traceability of food products produced from GMO, we confirm that the product:

Contains ingredient(s)from Maize and/or Soya origin	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Contains no material which contains,consists of or is produced from authorized GMOs in proportion higher than 0,9%.This presence is adventitious or technically unavoidable	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
is GMO or contains or consists of GMOs	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO



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is produced from GMOs or contains ingredients produced from GMOs	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Contains ingredient(s) from other potential GMO-risk raw material(s) (rice, beet, cotton ...)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If Yes, please specify: o ingredient: o vegetable origin: o geographic origin:		
Contains no material which contains, consists of or is produced from evaluated GMOs in proportion higher than 0,5%. This presence is adventitious or technically unavoidable	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
For information about processing aids, is produced or contains ingredient(s) produced with GMOs or Genetically Modified Microorganisms processing aids (bacteria, yeast... or derived from GMOs or GMMs (including enzymes))	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If yes, please specify:		
We confirm that the ingredient supplied is compliant in all respects with the Regulations N° 1829/2003/EC and N° 1830/2003/EC where applicable	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

## SUBSTANCES OR PRODUCTS CAUSING ALLERGIES OR INTOLERANCES

According to Regulation (EU) N° 1169/2011 as regards of ingredients present in foodstuffs

Allergenic substances (Regulation EU 1169/2011 - Annex II)	Present in finished product	Present in the manufacturing site	Present on the same manufacturing line	Possible cross-contamination
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains)	NO	NO	NO	NO
Crustaceans and products thereof	NO	NO	NO	NO
Eggs and products thereof	NO	NO	NO	NO
Fish and products thereof	NO	NO	NO	NO
Peanuts and products thereof	NO	NO	NO	NO
Soybeans and products thereof	NO	NO	NO	NO
Milk and products thereof (including lactose)	NO	NO	NO	NO
Nuts (almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nut, macadamia nut)	NO	NO	NO	NO
Celery and products thereof	NO	NO	NO	NO



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Mustard and products thereof	NO	NO	NO	NO
Sesame seeds and products thereof	NO	NO	NO	NO
Sulphur dioxide and sulphites (>10 mg/kg or 10 mg/L expressed as SO <sub>2</sub> )	NO	NO	NO	NO
Lupin and products thereof	NO	NO	NO	NO
Molluscs and products thereof	NO	NO	NO	NO

**NON IRRADIATION**

According to UE Directive N°1999/2/CE

Has this raw material or one of its ingredients been irradiated or ionised	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
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**NANOMATERIAL**

According to Regulation(EU)N°1169/2011

Does this raw material contain or can be considered as engineered nanomaterial	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Does this raw material have been made with nanotechnology?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Does the product contain nanotechnology as defined by the French decree n°2012-232?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

**RESIDUAL SOLVENTS**

According to UE Directive 2009/32 modified by (UE)2010/59 and CPMP/ICH/283/95Q3C

Does the raw material contain any residual solvent	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If yes, please give: percentage and name of each solvent used: level of residual solvents:		
Is the product in compliance with the UE Directive 2009/32	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Is the product in compliance with the ICH guidelines	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

**FOOD CERTIFICATE**

Manufacturer's quality certificates:				
ISO 9001 <input type="checkbox"/>	GMP <input type="checkbox"/>	ISO 14001 <input type="checkbox"/>	ISO 22000 <input type="checkbox"/>	<input checked="" type="checkbox"/> OTHER
Is the raw material Food Grade?			<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Can the product be used in babyfood(Directive 2006/141/CE)?			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Does the product comply with the UE Regulation N°231/2012 about additives?			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Is the product complying with a Pharmacopeia monography?			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Is the product complying with the UE Regulation N°1334/2008 about flavourings?			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Was the product used in the European food industry before May 1997?			<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
If no, could you provide an authorisation (according to Regulation 258/97/EC)?			<input type="checkbox"/> YES	<input type="checkbox"/> NO



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Are stability studies available?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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### CONTAMINANTS

Is the product conforming to UE regulations No 1881/2006 and No 629/2008 setting maximum levels for certain contaminants in foodstuffs,as amended?		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Contaminants	Tested?	Result	
Pesticides (multi-residue)?	Yes	Complies with EU 396/2005	
Dioxins and dioxin like PCBs?	NO	Not routinely tested	
Heavy metals	YES	Complies ( $\leq 10$ ppm)	
PAHs(PAH4)	YES	Complies with EU 915/2023	
Benzo[a]pyrens?	YES	Complies with EU 915/2023	
Mycotoxins (Aflatoxins, OTA)	YES	Complies with EU 915/2023	
3-MCPD	NO	Not applicable	
Doping like substances? <a href="http://list.wada-ama.org/">http://list.wada-ama.org/</a>	NO	Not applicable	

### FOREIGN BODIES

Which material do you use in order to fight against the foreign bodies			
	Presence?	Test frequency	Where is it located on the process line?
Magnet	YES	Continuous	Raw material intake / processing line
Metal detector	YES	Each batch	Before packaging
Sieve	YES	Continuous	During processing
Filter	YES	Continuous	Extraction / filtration stage
X-ray detection	NO	N/A	N/A
Other(please specify)			

### NUTRITIONAL VALUES

Items	Values
Energy(kJ/kcal)	$\approx 1550$ kJ
Total Fat(g)	$\approx 3.8$ g
Saturate Fat(g)	
Mono-unsaturated Fat(g)	
Polyunsaturated Fat(g)	



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Total Carbohydrate(g)	≈ 54.0 g
Sugars(g)	
Polyols(g)	
Starch(g)	
Fibre(g)	≈ 35.1 g
Protein(g)	≈ 35.1 g
Salt(g)	
Vitamins:	
Vitamin A(μg)	
Vitamin D(μg)	
Vitamin E(mg)	
Vitamin K(μg)	
Vitamin C(mg)	
Thiamin(mg)	
Riboflavin(mg)	
Niacin(mg)	
Vitamin B6(mg)	
Folic acid(μg)	
Vitamin B12(μg)	
Minerals:	
Pantothenic acid(mg)	
Potassium(mg)	
Chloride(mg)	
Calcium(mg)	
Phosphorus(mg)	
Magnesium(mg)	
Iron(mg)	
Zinc(mg)	
Copper(mg)	
Manganese(mg)	
Fluoride(mg)	
Selenium(μg)	
Chromium(μg)	
Molybdenum(μg)	
Iodine(μg)	

## TRACEABILITY

Batch size	1MT
Batch definition	A batch is defined as a homogeneous production lot



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	produced under the same conditions
Signification of the batch number by an example	
Marking method (labelling...)	
<b>PACKAGING</b>	
Is the packaging material approved as food grade according to regulations 1935/2004,10/2011 and 1282/2011?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Do you guarantee the packaging traceability according to regulation 1935/2004(art 17)?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Can you guarantee that the product and its packaging supplied t( do not contain Phtalates?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Can you guarantee that the product and its packaging supplied to do not contain ITX? (A packaging contaminant:Isopropylthioxanthone(ITX)found in dairy products)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Can you guarantee that the product and its packaging supplied tos do not contain BisphenolA(BPA)?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Do you add desiccant bags during packaging process? If so,where do you mention it:.....	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Can you provide migration test in order to guarantee packaging safety?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>WASTE DISPOSAL</b>	
<p>What is your waste disposal method?By professional waste handling facility Please indicate waste code(according to OJ 2006/1013 on July 12th,2006):</p>	

## DISTRIBUTOR/MANUFACTURER CHANGE CONTROL STATEMENT OF COMMITMENT

<p>Name of the product: :Kale Powder</p> <p>Commercial name:Kale Powder</p> <p>Distributor's name</p> <p>Manufacturer's name:</p> <p>Manufacturing site's address:</p> <p>We will notify you of any changes which may have an impact on the quality of the product,when the supplier/manufacturer informs us:</p> <ul style="list-style-type: none"> <li>- Supplier,manufacturer or raw material origin change/</li> <li>- Raw material quality change</li> <li>- Manufacturing process change</li> <li>- Manufacturing site change</li> <li>- Equipment and/or critic premise change</li> <li>- Subcontractor set up</li> </ul>
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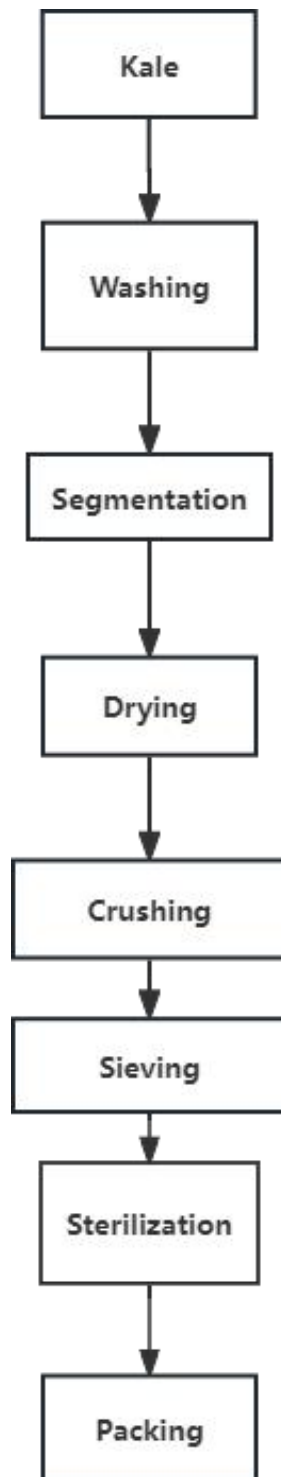


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Subcontractor change  
Method of analysis change  
Release specifications change  
Raw material reference change  
Identification change  
Packaging unit and/or labelling and/or packaging change  
Appearance and/or content of certificate of analysis change/  
Supplying stop



## Annex 1 Flow Chart





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# Safety Data Sheet

## Section 1 - Identification

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**Product Identification:** Kale Powder  
**Botanic Name:** *Brassica oleracea var. sabellica*  
**Recommended use :** Food and Dietary supplement  
**Restrictions on use:** /  
**Manufacturer's Country:** China

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## Section 2 - Hazards Identification, Including Emergency Overview

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**Classification:** No data available.  
**Emergency Overview:** No data available.  
**OSHA Hazards :** No known OSHA hazards  
**GHS Label elements:**  
Pictogram: No data available.  
Signal word : No data available.  
Hazard statement(s): No data available.  
Precautionary statement(s): If eye irritation persists: Get medical advice/attention.  
**Health Hazards Acute & Chronic:**  
Potential Health Effects  
Eye: May cause eye irritation  
Skin: Won't cause skin irritation.  
Ingestion: Harmless if swallowed

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## Section 3 - Composition/Information on Ingredients

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**Ingredient name:** Kale Powder  
**Common name:** Kale Powder  
**Synonyms:** Kale Powder



**Chemical Abstracts Service (CAS) number:** /

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#### **Section 4 - First Aid Measures**

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**First Aid:**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Immediately flush skin with plenty of water.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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#### **Section 5 - Fire Fighting Measures**

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**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not available.

**Auto ignition Temperature:** Not available.

**Explosion Limits,**

Lower: Not available.

Upper: Not available.

**NFPA Rating:** Not published.

**Precautions For Firefighters:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well—ventilated area away from incompatible substances. Store in a tightly closed container.

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#### **Section 6 - Accidental Release Measures**

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**Personal Precautions:** Avoid dust formation. removal of ignition sources or providing sufficient ventilation. Use proper personal protective equipment as indicated in Section 8.

**Emergency Procedures:** Wear NIOSH/MSHA approved SCBA, Rubber boots and heavy rubber gloves. Sweep up, Place in bag and hold for waste disposal. Avoid Raising dust. Ventilate area and wash spill site after material pickup is complete.

**Methods and materials used for containment:** Sweep up and shovel. Keep in suitable, closed containers for disposal

**Cleanup procedures:** After removal, ventilate contaminated area and flush thoroughly with



water.

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### Section 7 - Handling and Storage

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**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Avoid contact with skin, eyes and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well—ventilated area away from incompatible substances. Store in a tightly closed container.

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### Section 8 - Exposure Controls & Personal Protection

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**Permissible Exposure Limits:** No data available.

**Threshold Limit Values:** No data available.

**Engineering Controls:**

Safety shower and eye bath. Mechanical exhaust required. Use non-sparking tools.

**Personal Protective Equipment:**

**Respiratory:** government-approved respirator.

**Hand:** compatible chemical-resistant gloves.

**Eye:** chemical safety goggles.

**General Hygiene Measures:**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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### Section 9 - Physical & Chemical Properties

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**Physical State:** Fine Powder

**Colour:** Green to Yellow Green

**Odour:** Characteristic

**Melting point/freezing point:**Not available

**Boiling point or initial boiling point and boiling range:**Not available

**Flammability:**Not available

**Lower and upper explosion limit/flammability limit:**Not available

**Flash point:**Not available

**Auto-ignition temperature:**Not available

**Decomposition temperature:**Not available

**PH:**Not available

**Kinematic viscosity:**Not available

**Solubility:** Insoluble in water

**Partition coefficient: n-octanol/water (log value):**Not available

**Vapor Pressure:** Not available

**Density and/or relative density:**Not available



**Relative vapour density:**Not available

**Particle characteristics:/**

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### Section 10 - Stability & Reactivity Data

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**Reactivity:**Not available

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid - Instability:** Ignition sources, excess heat.

**Incompatibility –Incompatible materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide , Sulfur dioxide

**Hazardous Polymerization :** Has not been reported.

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### Section 11 - Toxicological Information

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**Acute toxicity :** No data available

**Skin corrosion/irritation:** No data available

**Serious eye damage/eye irritation:** May cause eye irritation

**Respiratory or skin sensitization:** No data available

**Germ cell mutagenicity:** No data available

**Chronic exposure**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**LD50/LC50:** Not available.

**Carcinogenicity:** Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

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### Section 12 - Ecological Information

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**Ecological Information:** Not information available

**Further information on ecology:** Not information available

**Elimination information (persistence and degradability) :** Not information available

**Bioaccumulative potential:** Not information available

**Mobility in soil:** Not information available

**Other adverse effects:** Not information available

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### Section 13 - Disposal Considerations



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**Waste Disposal Methods:** Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

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#### **Section 14 - MSDS Transport Information**

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**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods IATA Not dangerous goods

**IATA**

Not regulated as a hazardous material.

**IMO**

Not regulated as a hazardous material.

**RID/ADR**

Not regulated as a hazardous material.

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#### **Section 15 - Regulatory Information**

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**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

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#### **Section 16 - Other Information**

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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.