

# **SAFETY DATA SHEET**

**Regulation :** In accordance with Regulation (EU) 2015/830 (REACH), Annex II

## **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

### **1.1 Product identifier**

**Product name :** Peach patch

### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Recommended use of the chemical and restrictions on use**

**Recommended use :** Floor Patch (Health Aid Product)

**Restrictions on use :** Don't ingest and inhale

### **1.3 Details of the supplier of the safety data sheet**

#### **Supplier**

**Company name :** KJI Industrial CO., LTD.

**Address :** 29, Gyeseok-ro, Dong-myeon, Yangsan-si, Gyeongsangnam-do, Republic of Korea

**Telephone number :** +82-55-383-9975

**Respondent :** Quality Assurance Officer

**Fax :** +82-55-383-9978

### **1.4 Emergency Telephone : +82-55-383-9975**

## **SECTION 2 : HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

is classified according to Regulation (EC) No 1272/2008 [CLP]

#### **2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP] :**

Not classified

#### **2.1.2 Additional information :**

For full text of Hazard- and EU Hazard-statements: see SECTION 16

### **2.2 Label elements**

**Hazard pictograms :** Not applicable

**Signal word :** Not applicable

**Hazard statement :** Not applicable

**Additional precautionary statements :** Not applicable

## 2.3 Other hazards

No information available

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Mixture

Chemical Name	Common Name (Synonyms)	CAS Number	EC number	Content (%)	Classification according to Regulation (EC) No 1278/2008 (CLP)
D-Sorbitol	Cholaxine	50-70-4	200-061-5	52.00~64.00	Not classified
Starch	Amylum	9005-25-8	232-679-6	23.00~29.00	Not classified
High-Purity Silica	Silicon dioxide	7631-86-9	231-545-4	4.00~8.00	Not classified
Perlite	Not available	130885-09-5	Not available	0.72~2.72	Not classified
Wood Vinegar	Creosote	8021-39-4	232-419-1	0.72~2.72	Not classified
Glycerine	Glycerol	56-81-5	200-289-5	0.72~2.72	Not classified

Eucalyptus Oil	Oil eucalyptus globulus or macarthuri	8000-48-4	Not available	0.01~0.05	Not classified
Tourmaline	Not available	1317-93-7	Not available	0.10~0.50	Not classified
Vitamin C	L-Ascorbic acid	50-81-7	200-066-2	0.10~0.50	Not classified
Artemisia princeps, ext.	Not available	223747-95-3	Not available	0.01~0.05	Not classified
Loquat, ext.	Not available	91770-19-3	294-804-0	0.01~0.05	Not classified
Zeolite	aluminosilicates, composed of silica (SiO <sub>2</sub> ) and alumina (Al <sub>2</sub> O <sub>3</sub> )	1318-02-1	215-283-8	0.50~1.50	Not classified
Peach Perfume	- Business Secret -			1.00~3.00	Not classified

## SECTION 4 : FIRST-AID MEASURES

### 4.1 Description of first aid measures

#### General notes

Not available

**Following eye contact :**

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

#### **Following skin contact :**

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

#### **Following inhalation :**

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

#### **Following ingestion :**

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

#### **Self-protection of the first aider :**

- Not available

### **4.2 Most important symptoms and effects, both acute and delayed**

#### **Acute effects**

- Not available

#### **Delayed effects**

- Not available

### **4.3 Indication of immediate medical attention and special treatment needed**

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## **SECTION 5 : FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media:**

- Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO<sub>2</sub>

#### **Unsuitable extinguishing media:**

- High pressure water streams

### **5.2 Special hazards arising from the substance or mixture :**

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.

- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

**Hazardous combustion products :** Not available

### **5.3 Advice for firefighters**

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

## **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

#### **6.1.1 For non-emergency personnel**

##### **Protective equipment :**

- Use personal protective equipment, see Section 8

##### **Emergency procedures:**

- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.

#### **6.1.2 For emergency responders**

- Eliminate all ignition sources.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

### **6.2 Environmental precautions**

- Prevent entry into waterways, sewers, basements or confined areas.

### **6.3 Methods and material for containment and cleaning up**

#### **6.3.1 For containment**

- Large Spill; Dike far ahead of liquid spill for later disposal.

#### **6.3.2 For cleaning up**

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

#### **6.3.3 Other information**

- Not available

#### 6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

### SECTION 7 : HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

##### Protective measures :

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.

##### Measures to prevent fire :

- Be careful to high temperature.

**Measures to protect the environment :** Not available

**Measures to prevent aerosol and dust generation :** Not available

**Advice on general occupational hygiene :** Not available

#### 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures and storage conditions :** Not available

**Packaging materials :** Not available

##### Requirements for storage rooms and vessels :

- Store in a closed container.
- Store in cool and dry place.

##### Storage class

**Further information on storage conditions :** Not available

#### 7.3 Specific end use(s)

**Recommendations :** Not available

**Industrial sector specific solutions :** Not available

### SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

##### Occupational Exposure limits

Name	ACGIH regulation	Biological exposure index	OSHA regulation	NIOSH regulation	EU regulation
D-Sorbitol	Not available	Not available	Not available	Not available	Not available
Starch	TWA = 10 mg/m <sup>3</sup>	Not available	TWA = 15 mg/m <sup>3</sup> (Total dust), TWA = 5 mg/m <sup>3</sup>	TWA = 10 mg/m <sup>3</sup> (total), TWA = 5 mg/m <sup>3</sup> (resp)	Not available

			(Respirable fraction)		
High-Purity Silica	Not available	Not available	Not available	TWA = 6 mg/m <sup>3</sup>	Not available
Perlite	Not available	Not available	Not available	Not available	Not available
Glycerine	Not available	Not available	TWA = 15 mg/m <sup>3</sup> (Total dust), TWA = 5 mg/m <sup>3</sup> (Respirable fraction)	Not available	Not available
Wood Vinegar	Not available	Not available	Not available	Not available	Not available
Tourmaline	Not available	Not available	Not available	Not available	Not available
Vitamin C	Not available	Not available	Not available	Not available	Not available
Artemisia princeps, ext.	Not available	Not available	Not available	Not available	Not available
Eucalyptus Oil	Not available	Not available	Not available	Not available	Not available
Loquat, ext.	Not available	Not available	Not available	Not available	Not available
Zeolite	Not available	Not available	Not available	Not available	Not available
Peach Perfume	Not available	Not available	Not available	Not available	Not available

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls :

**Substance/mixture related measures to prevent exposure during identified uses :** Not available

**Structural measures to prevent exposure :** Not available

**Organisational measures to prevent exposure :** Not available

**Technical measures to prevent exposure :**

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

## **8.2.2 Individual protection measures, such as personal protective equipment :**

### **Eye and face protection :**

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.
- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.

### **Skin protection :**

#### **(i) Hand protection :**

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

#### **(ii) Other skin protection :**

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

### **Respiratory protection :**

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to particulate material, the respiratory protective equipments as follow are recommended. ;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use (dust, mist, fume)
- In lack of oxygen (< 19.5%), wear the supplied-air respirator or self-contained oxygen breathing apparatus.

**Thermal hazards :** Not available

## **8.2.3 Environmental exposure controls**

### **Substance/mixture related measures to prevent exposure :**

- Not available

### **Instruction measures to prevent exposure :**

- Not available

### **Organisational measures to prevent exposure :**

- Not available

### **Technical measures to prevent exposure :**

- Not available

## **SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

#### **Appearance**



**Description :** Solid (Powder)

**Color :** Not available

**Odor :** A pastoral scent

**Odor threshold :** Not available

**pH :** Not available

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

**Initial boiling point and boiling range :** Not available

**Flash point :** Not available

**Evaporation rate :** Not available

**Flammability (solid, gas) :** Not available

**Upper/lower flammability or explosive limits :** Not available

**Vapor pressure :** Not available

**Solubility (ies) :** Non flammable (water)

**Vapor density :** Not available

**Specific gravity :** Not available

**Partition coefficient: n-octanol/water :** Not available

**Auto ignition temperature :** Not available

**Decomposition temperature :** Not available

**Viscosity :** Not available

**Explosive properties :** Not available

**Oxidizing properties :** Not available

**Molecular weight :** Not available

## **9.2 Other information**

Not available

## **SECTION 10 : STABILITY AND REACTIVITY**

**10.1 Reactivity :** Not available

**10.2 Chemical stability :** Not available

### **10.3 Possibility of hazardous reactions**

- Fire may produce irritating and/or toxic gases
- Inhalation of material may be harmful

### **10.4 Conditions to avoid**

- Ignition sources (heat, sparks or flames)

### **10.5 Incompatible materials**

- Combustibles

## 10.6 Hazardous decomposition products

- Irritating and/or toxic gases

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

(a) Acute toxicity;	<p><b>Oral : Not classified (<math>ATE_{mix} = 13,298 \text{ mg/kg}</math>)</b></p> <ul style="list-style-type: none"><li>- <b>Wood Vinegar</b> : Rat <math>LD_{50} = 870 \text{ mg/kg}</math> (female)</li><li>- <b>High-Purity Silica</b> : Rat <math>LD_{50} &gt; 5,000 \text{ mg/kg}</math> (OECD Guideline 401, GLP)</li><li>- <b>Glycerine</b> : Rat <math>LD_{50} = 27,200 \text{ mg/kg}</math></li><li>- <b>Eucalyptus Oil</b> : Rat <math>LD_{50} = 2,480 \text{ mg/kg}</math></li><li>- <b>Vitamin C</b> : Rat <math>LD_{50} = 5,000 \text{ mg/kg}</math></li><li>- <b>D-Sorbitol</b> : Rat <math>LD_{50} = 15,900 \text{ mg/kg}</math></li></ul> <p><b>Dermal : Not classified (<math>ATE_{mix} = 78,448.44 \text{ mg/kg}</math>)</b></p> <ul style="list-style-type: none"><li>- <b>High-Purity Silica</b> : Rabbit <math>LD_{50} &gt; 2,000 \text{ mg/kg}</math></li><li>- <b>Glycerine</b> : Guinea pig <math>LD_{50} = 56,750 \text{ mg/kg}</math></li><li>- <b>Eucalyptus Oil</b> : Rabbit <math>LD_{50} = 2,480 \text{ mg/kg}</math></li></ul> <p><b>Inhalation : Not classified</b></p> <ul style="list-style-type: none"><li>- <b>High-Purity Silica</b> : Rat <math>LC_{50} &gt; 2.08 \text{ mg/L / 4 hr}</math> (OECD Guideline 403, GLP)</li><li>- <b>Glycerine</b> : Rat <math>LC_{50} &gt; 2.75 \text{ mg/L / 4 hr}</math></li></ul>
(b) Skin Corrosion/Irritation;	<p><b>Not classified</b></p> <ul style="list-style-type: none"><li>- <b>Wood Vinegar</b> : Vapor condensation of creosote on skin or mucous membrane, or contact with skin causes local erythema, rash, burns and itching</li><li>- <b>High-Purity Silica</b> : In the skin irritation test using rabbits, skin irritations were not observed (OECD Guideline 404, GLP)</li><li>- <b>Glycerine</b> : In the skin irritation test with rabbits, skin irritations were not observed</li><li>- <b>Vitamin C</b> : In the skin irritation test using rabbits, skin irritations were not observed (OECD Guideline 404)</li></ul>

(c) Serious Eye Damage/ Irritation;	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>Wood Vinegar</b> : Causing keratoconjunctivitis, loss of corneal epithelium, prolonged irritation and photophobia when creosote comes into contact with the eye</li> <li>- <b>High-Purity Silica</b> : In the eyes irritation test using rabbits, the test material was not irritating (OECD Guideline 405, GLP)</li> <li>- <b>Glycerine</b> : In the eyes irritation test with rabbits, eyes irritations were not observed</li> <li>- <b>Vitamin C</b> : In the eyes irritation test using rabbits, the test material was not irritating (OECD Guideline 405)</li> </ul>
(d) Respiratory sensitization;	Not available
(e) Skin Sensitization;	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>Glycerine</b> : Skin sensitization tests on 420 patients with eczema did not show any irritation or sensitiveness to 419 people, but they did not prove it to one person who showed sensitivity</li> </ul>
(f) Carcinogenicity;	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : IARC - Group 3</li> <li>- <b>Starch</b> : ACGIH - A4 (Not Classifiable as a Human Carcinogen)</li> </ul>
(g) Mutagenicity;	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>Wood Vinegar</b> : In vitro mutagenicity was shown because mutagenic aromatic hydrocarbons existed in Salmonella typhimurium TA1537, TA1538, TA98, TA100</li> <li>- <b>High-Purity Silica</b> : Negative reaction was observed in vivo Mammalian Bone Marrow Chromosome Aberration Test. (OECD Guideline 475), Negative reactions were observed in vitro Bacterial Reverse Mutation Assay.</li> </ul>

	<p>(OECD Guideline 471, GLP)</p> <ul style="list-style-type: none"> <li>- <b>Glycerine</b> : In vitro mammalian cell gene mutation test using Chinese hamster ovary showed negative for mutagenicity. (OECD Guideline 476)</li> <li>- <b>Vitamin C</b> : In vitro-mouse lymphocyte cell / gene mutation test (GLP) : negative, HeLa Cells / UDS test (GLP) : positive, with or without metabolic activation, CHO Cells / Sister Chromatid Exchange Test (GLP) : Positive, with or without metabolic activation In vivo-Chinese Hamster / Sister Chromatid Exchange Test (GLP) : negative, Mouse / micronucleus test (GLP) : negative</li> </ul>
(h) Reproductive toxicity;	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : In the reproductive toxicity test using fish and mammals, no reproductive toxicity was found (NOAEL &gt; 75 mg/kg bw/day)</li> <li>- <b>Glycerine</b> : Reproductive toxicity studies using rats (male / female) did not affect growth, fertility and fertility during the second generation. It also does not affect developmental toxicity. (NOAEL = 1310 mg/kg bw/day)</li> <li>- <b>Vitamin C</b> : In the developmental toxicity / teratogenicity test using mouse, no toxicity was found (NOAEL = 1000 mg/kg / day)</li> <li>- <b>D-Sorbitol</b> : Reproductive toxicity studies with rats showed no adverse effects on growth or fertility in any sex from three successive generations of rats fed diets at levels up to 10%</li> </ul>
(i) Specific target organ toxicity (single exposure);	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>Wood Vinegar</b> : Fatalities have occurred 14-36 hr after the ingestion of about 7 g by adults or 1~2 g by children, Human toxicity indicates vomiting, diarrhea, dizziness and signs of pulmonary edema</li> <li>- <b>High-Purity Silica</b> : In the acute toxicity (oral) test using rats,</li> </ul>

	<p>the test material was acutely non toxic. (OECD Guideline 401, GLP)</p> <ul style="list-style-type: none"> <li>- <b>Glycerine</b> : Acute oral toxicity test in rats (male) showed body tremor and clonic convulsions prior to death</li> <li>- <b>Vitamin C</b> : Diarrhea, nausea and headache symptoms when over-consuming 250 mg to 15 g of Vitamin C</li> </ul>
(j) Specific target organ toxicity (repeat exposure);	<p><b>Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : In the sub-chronic toxicity(oral) test with rats for 90 days, organ toxicity was not observed. (OECD Guideline 408, GLP)</li> <li>- <b>Glycerine</b> : As a result of oral administration toxicity test for 90 days in rats (male/female), edema and hypertrophy of parenchymal cells were observed in male ingesting 20 % glycerol, and females generally showed symptoms only in liver (male: 18,750 mg/kg/day, female: 25,800 mg/kg/day)</li> </ul>
(k) Aspiration Hazard;	Not available

## SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity	
Acute toxicity	<p><b>Not classified (LC<sub>50</sub> = 4.69 mg/L)</b></p> <p><b>Fish : LC<sub>50</sub> = 4.69 mg/L</b></p> <ul style="list-style-type: none"> <li>- <b>Wood Vinegar</b> : 96hr - LC<sub>50</sub> (Sheepshead minnows) = 0.72 mg/L</li> <li>- <b>High-Purity Silica</b> : 96hr - LC<sub>50</sub> (Fishes species) = 1,033.016 mg/L ((Q)SAR)</li> <li>- <b>Glycerine</b> : 96hr - LC<sub>50</sub> (Oncorhynchus mykiss) = 54,000 mg/L</li> <li>- <b>Eucalyptus Oil</b> : 96hr - LC<sub>50</sub> (Fish) = 12.165 mg/L (estimated)</li> <li>- <b>Vitamin C</b> : 96hr - LC<sub>50</sub> (Oncorhynchus mykiss) = 1,020 mg/L</li> </ul>

	<p><b>Invertebrates : <math>EC_{50} = 29 \text{ mg/L}</math></b></p> <p><b>Algae : <math>E(r)C_{50} = 133.12 \text{ mg/L}</math></b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : 96hr - <math>EC_{50}</math> (Green Algae) = 217.576 mg/L ((Q)SAR)</li> <li>- <b>Eucalyptus Oil</b> : 96hr - <math>EC_{50}</math> (Green Algae) = 8.805 mg/L (estimated)</li> </ul>
Chronic toxicity	<p><b>Not classified</b></p> <p><b>Fish : Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : 30day - NOEC (Fishes species) = 57.001 mg/L ((Q)SAR)</li> </ul> <p><b>Invertebrates : Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : 30day - NOEC (Daphnid species) = 34.223 mg/L ((Q)SAR)</li> </ul> <p><b>Algae : Not classified</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : 30day - NOEC (Green Algae) = 42.11 mg/L ((Q)SAR)</li> <li>(Pseudokirchneriella subcapitata) = 4.6 mg/L (EU Method C.3, GLP)</li> </ul>
12.2 Persistence and Degradability	<p><b>Persistence :</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : Low persistency (log Kow is less than 4 estimated.) ( log Kow = 0.53 ) (25 °C, pH = 7)</li> <li>- <b>Glycerine</b> : Low persistency (log Kow is less than 4 estimated.) ( log Kow = -1.75 ) (25 °C, pH = 7.4)</li> <li>- <b>Eucalyptus Oil</b> : Low persistency (log Kow is less than 4 estimated.) ( log Kow = 3.13 ) (estimated)</li> <li>- <b>Vitamin C</b> : Low persistency (log Kow is less than 4 estimated.) ( log Kow = -2.0482 )</li> <li>- <b>D-Sorbitol</b> : Low persistency (log Kow is less than 4 estimated.) ( log Kow = .20 )</li> </ul> <p><b>Degradability</b> : Not available</p>
12.3 Bioaccumulative potential	<p><b>Bioaccumulation :</b></p> <ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : Bioaccumulation is expected to be low</li> </ul>

	<p>according to the BCF &lt; 500 ( BCF = 3.162 )</p> <ul style="list-style-type: none"> <li>- <b>Eucalyptus Oil</b> : Bioaccumulation is expected to be low according to the BCF &lt; 500 ( BCF = 29.84 ) (estimated)</li> <li>- <b>Vitamin C</b> : Bioaccumulation is expected to be low according to the BCF &lt; 500 ( BCF = 3.162 ) (estimated)</li> <li>- <b>D-Sorbitol</b> : Bioaccumulation is expected to be low according to the BCF &lt; 500 ( BCF = 3 ) (SRC) (estimated)</li> </ul> <p><b>Biodegradation :</b></p> <ul style="list-style-type: none"> <li>- <b>Glycerine</b> : As well-biodegraded, it is expected to have low accumulation potential in living organisms(94 % biodegradation was observed after 24)</li> <li>- <b>Eucalyptus Oil</b> : Does Not Biodegrade Fast (estimated)</li> <li>- <b>Vitamin C</b> : As well-biodegraded, it is expected to have low accumulation potential in living organisms(97% biodegradation was observed after 5 days))</li> <li>- <b>D-Sorbitol</b> : As well-biodegraded, it is expected to have low accumulation potential in living organisms(81 % biodegradation was observed after 2)</li> </ul>
12.4 Mobility in soil	<ul style="list-style-type: none"> <li>- <b>High-Purity Silica</b> : No potency of mobility to soil. (Koc = 21.73)</li> <li>- <b>Eucalyptus Oil</b> : No potency of mobility to soil. (Koc = 221.2) (estimated)</li> <li>- <b>Vitamin C</b> : No potency of mobility to soil. (Koc = 10) (estimated)</li> <li>- <b>D-Sorbitol</b> : No potency of mobility to soil. (Koc = 10) (SRC) (estimated)</li> </ul>
12.5 Results of PBT and vPvB assessment	Not available
12.6 Other adverse effects	Not available
12.7 Hazardous to the	Not applicable

ozone layer	
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## SECTION 13 : DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### 13.1.1 Product / Packaging disposal:

- Waste and container must be disposed of in accordance with federal, state and local environmental control regulations.

**Waste codes / waste designations according to LoW** : Not available

#### 13.1.2 Waste treatment-relevant information

- Consider the required attentions in accordance with waste treatment management regulation.

#### 13.1.3 Sewage disposal-relevant information

- Not available

#### 13.1.4 Other disposal recommendations:

- Not available

## SECTION 14 : TRANSPORT INFORMATION

**14.1 UN Number** : Not applicable

**14.2 UN Proper shipping name** : Not applicable

**14.3 Transport Hazard class** : Not applicable

**14.4 Packing group** : Not applicable

**14.5 Environmental hazards** : Not applicable

### 14.6 Special precautions

**in case of fire** : Not applicable

**in case of leakage** : Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** :

Not available

## SECTION 15 : REGULATORY INFORMATION

**15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture**

**EU Regulatory Information**

**EU Classification**

**Classification** : Not regulated

**Hazard statement codes** : Not regulated

**EU SVHC list** : Not regulated



**EU Authorisation List :** Not regulated

**EU Restriction List :**

- **Wood Vinegar :** Regulated

## **Foreign Regulatory Information**

**External information :**

**Substance of Rotterdam Convention :** Not regulated

**Substance of Stockholm Convention :** Not regulated

**Substance of Montreal Protocol :** Not regulated

**15.2 Chemical safety assessment :** No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## **SECTION 16 : OTHER INFORMATION**

**Product safety data sheet for prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II**

### **16.1 Indication of changes**

**Date Updated :** 20 September 2019

**Version :** Rev. 00

### **16.2 Abbreviations and acronyms**

**ACGIH** = American Conference of Government Industrial Hygienists

**CLP** = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008

**CAS No.** = Chemical Abstracts Service number

**EC Number** = EINECS and ELINCS Number (see also EINECS and ELINCS)

**EU** = European Union

**IARC** = International Agency for Research on Cancer

**NIOSH** = National Institute for Occupational Safety & Health

**NTP** = National Toxicology Program

**OSHA** = European Agency for Safety and Health at work

**PBT** = Persistent, Bioaccumulative and Toxic substance

**REACH** = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 453/2010

**SVHC** = Substances of Very High Concern

**vPvB** = Very Persistent and Very Bioaccumulative

**MARPOL** = International Convention for the Prevention of Pollution from Ships (IMO)

**IBC** = Intermediate Bulk Container

**EINECS** = European Inventory of Existing Commercial chemical Substances

**ELINCS** = European List of Notified Chemical Substances

### 16.3 Key literature reference and sources for data :

EPISUITE v4.11; <https://www.epa.gov/tsca-screening-tools/download-epi-suite-estimation-program-interface-v411>

OECD SIDS; <http://webnet.oecd.org/hpv/ui/Search.aspx>

REACH information on registered substances; <https://echa.europa.eu/information-on-chemicals/registered-substances>

U.S. National library of Medicine(NLM) ChemIDplus;  
<https://chem.nlm.nih.gov/chemidplus/>

U.S. National library of Medicine(NLM) Hazardous Substances Data Bank(HSDB);  
<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>

TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>

EU CLP; <https://echa.europa.eu/information-on-chemicals/cl-inventory-database>

American Conference of Governmental Industrial Hygienists TLVs and BEIs.

NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>

National Toxicology Program; <http://ntp.niehs.nih.gov/results/dbsearch/>

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans;

Waste Control Act enforcement regulation attached [1]

### 16.4 Classification and procedure used to derive the classification for mixtures according to Regulation(EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008	Classification procedure
Not classified	Not available

### 16.5 Training advice :

- Do not handle until all safety precautions have been read and understood.

### 16.6 Further information :

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.