

## Safety Data Sheet

### BROCCOLI PIECES

Safety Data Sheet dated: 5/28/2015 - version 1

Date of first edition: 5/28/2015

---

## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade Name: BROCCOLI PIECES

### Other means of identification

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Sensient Natural Ingredients

151 South Walnut Road

Turlock, CA

+1 209-667-2777

---

## 2. HAZARD(S) IDENTIFICATION

This mixture has not been tested as a whole. It contains ingredients that could present a health hazard to employees, as outlined below.

### Classification of the chemical

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Label elements

This product is not a hazardous article and need not be labelled according to EC Directive 67/548, 99/45 as amended.

### Ingredient(s) with unknown acute toxicity

None

### Hazards not otherwise classified identified during the classification process:

None

NIOSH has reported the occurrence of severe lung disease in some workers who make or use flavorings. According to the December 2003 NIOSH Report, the main respiratory symptoms experienced by workers affected by fixed airways obstruction include cough (usually without phlegm) and shortness of breath on exertion. NIOSH further reports that some workers may experience fever, night sweats, and weight loss.

---

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Not determined

### Mixtures

The identify of one or more individual components of this mixture and the exact percentage concentrations of disclosed components of this mixture are considered proprietary information and are being withheld as trade secret information pursuant to 29 CFR 1910.1200(i).

None

---

## 4. FIRST AID MEASURES

### Description of first aid measures

In case of skin contact:

Wash with plenty of water and disinfectant/non-abrasive soap.

In case of eye contact:

Wash immediately with water.

In case of ingestion:

Do not induce vomiting. Seek immediate medical attention and provide SDS to medical provider.

In case of inhalation:

Remove exposed person to fresh air and keep warm and at rest.

### Most important symptoms/effects, acute and delayed

Not determined

### Indication of any immediate medical attention and special treatment needed

---

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media:

In case of fire use dry chemical, foam or CO2 for extinction.

In case of fire use dry chemical, foam or CO2 for extinction.

### Unsuitable extinguishing media

None identified

### Specific hazards arising from the chemical

Do not inhale explosion or combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not determined

Explosive properties: Not relevant (UN Test 3(a)ii BAM Fallhammer)

Oxidizing properties: Not relevant (Oxidizing Liquids Test Chamber)

### Special personal protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water. Do not discharge into drains.

Move undamaged containers from immediate hazard area but only if it can be done safely.

---

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment.

Remove exposed persons to safety.

See protective measures under points 7 and 8.

### Methods and material for containment and cleanup

Suitable material for taking up: dry and inert absorbing material (e.g. vermiculite, sand, earth).

Wash with plenty of water.

---

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapors and mists.

Do not eat or drink while working.

See also section 8 for recommended personal protective equipment.

### Conditions for safe storage, including any incompatibilities

Incompatible materials:

None identified

Instructions regarding storage premises:

Adequately ventilated premises.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

No Data Available

Appropriate engineering controls: Not determined

### Individual protection measures

Eye/face protection:

Not needed for normal use. Follow good working practices.

Skin protection:

No special precautions necessary for normal use.

Hand protection:

Not needed for normal use.

Respiratory protection:

Control worker exposure to below detectable levels. However, if an effective ventilation system is not in use, use a NIOSH-approved respirator for organic vapors and/or dusts. Where appropriate, use closed systems to transfer and process this material. If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. Use local exhaust as required to capture all airborne vapors and dust. If necessary, use an experienced air-sampling expert to identify and measure volatile chemicals that could be present in the workplace air to determine potential exposures and to ensure the continuing effectiveness of engineering controls and operation practices to minimize exposure. If necessary, implement pre-placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.

Additional Information:

In December 2003, the National Institute for Occupational Safety and Health (NIOSH) published an Alert on preventing lung disease in workers who use or make flavorings. NIOSH Publication Number 2004-110. In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a report entitled, "Respiratory Safety in the Flavoring Manufacturing Workplace". Both of these documents provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The recommendations

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State Solid  
Appearance: Pieces, Green (Visual)  
Odor: Vegetables (Organoleptic)  
Odor threshold: Not determined (Organoleptic)  
pH: Not determined (pH meter)  
Melting point/ range: Not determined  
Boiling point/ range: Not determined (OECD GUIDELINE 103)  
Flash point: Not determined (Pensky-Martens Closed Cup Test (ASTM D93))  
Evaporation rate: Not determined (Shell Thin-Film Evaporometer ASTM D3539 - 87(2004) )  
Upper/lower flammability or explosive limits: Not determined (ASTM E681-09)  
Vapor density: Not determined (Calculation)  
Vapor pressure: Not determined (ASTM D5190 - 07 for Petroleum Products)  
Density: Not determined (OECD GUIDELINE 109)  
Water solubility: Not determined (OECD GUIDELINE 105)  
Lipid solubility: Not determined (OECD GUIDELINE 105)  
Partition coefficient (n-octanol/water): Not determined (OECD GUIDELINE 123 Slow-Stirring Method)  
Auto-ignition temperature: Not determined (ASTM E659 Method for Liquid Chemicals.)  
Decomposition temperature: Not determined (Time Pressure Test Vessel)  
Viscosity: Not determined (OECD GUIDELINE 114)  
Explosive properties: Not determined (UN Test 3(a)ii BAM Fallhammer)  
Oxidizing properties: Not determined (Oxidizing Liquids Test Chamber)  
Flammability (Solid, Gas): Not determined (ASTM Method E681-94.)

### Other information

Substance group relevant properties: Not determined  
Miscibility: Not determined  
Fat solubility: Not determined  
Conductivity: Not determined (Conductivity meter)

---

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions.

### Chemical stability

Data not available.

### Possibility of hazardous reactions

Burning produces carbon monoxide and/or carbon dioxide.

### Conditions to avoid

Stable under normal conditions of temperature and pressure.

### Incompatible materials

Avoid strong oxidizing agents, peroxides, acids, alkali metals.

### Hazardous decomposition products

Burning produces carbon monoxide and/or carbon dioxide.

---

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Toxicological information of the product: No Data Available

### Substance(s) listed on the IARC Monographs:

None

### Substance(s) listed as OSHA Carcinogen(s):

None

### Substance(s) listed as NIOSH Carcinogen(s):

None

### Substance(s) listed on the NTP report on Carcinogens:

None

---

## 12. ECOLOGICAL INFORMATION

**Toxicity**

Adopt good working practices so that the product is not released into the environment.

**Persistence and degradability**

Not determined

**Bioaccumulative potential**

Not determined

**Mobility in soil**

Not determined

**Other adverse effects**

Not determined

---

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Do not dump into sewers, any body of water or onto the ground.

Recover if possible. Comply with applicable regulations.

---

**14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**UN number**

ADR-UN number: Not determined

DOT-UN Number: Not determined

IATA-Un number: Not determined

IMDG-Un number: Not determined

**UN proper shipping name****Transport hazard class(es)**

ADR-Class: Not determined

DOT Hazard Class: Not determined

IATA-Class: Not determined

IMDG-Class:

Not determined

**Packing group**

ADR-Packing Group:

Not determined

Exempted for ADR:

Not determined

IATA-Packing group:

Not determined

IMDG-Packing group:

Not determined

**Environmental hazards**

Marine pollutant: No

Environmental Pollutant: Not determined

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not determined

**Special precautions**

Department of Transportation (DOT):

Not determined

Road and Rail (ADR-RID):

Not determined

Air (IATA):

Not determined

Sea (IMDG):

Not determined

---

**15. REGULATORY INFORMATION****USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

**Section 313 - Toxic chemical list:**

no substances listed

**USA - State specific regulations**

**California Proposition 65**

**Substance(s) listed under California Proposition 65:**

no substances listed

---

**16. OTHER INFORMATION**

Safety Data Sheet dated: 5/28/2015 - version 1

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

CLP: Classification, Labeling, Packaging

EINECS: European Inventory of Existing Commercial Chemical Substances

INCI: International Nomenclature of Cosmetic Ingredients

CAS: Chemical Abstracts Service (division of the American Chemical Society)

GefStoffVO: Ordinance on Hazardous Substances, Germany

LC50: Lethal concentration, for 50 percent of test population

LD50: Lethal dose, for 50 percent of test population

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

TLV: Threshold Limiting Value

TWATLV: Threshold Limiting Value for the Time Weighted Average 8 hour day.(ACGIH Standard)

STEL: Short Term Exposure limit

STOT: Specific Target Organ Toxicity

WGK: German Water Hazard Class

KSt: Explosion coefficient