

# MATERIAL SAFETY DATA SHEET

## 1. Identification of the substance or mixture and of the supplier

**A. GHS product identifier** POLA FAMILY VOGUE ESPRESSO

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

**Recommended use** Air Freshener

**Restrictions on use** Use only as intended

**C. Manufacturers**

**Company name** Bullsone

**Address** 7F, Dabong Tower, 418, Teheran-ro Gangnam-gu, Seoul, 135-839, Korea

**Emergency phone number** 822-2106-7777

**Respondent** Han Dong Jin

**Fax** 822-2106-7911

## 2. Hazards identification

**A. GHS classification of the substance/mixture**

Skin sensitization : Category 1

Hazardous to the aquatic environment (acute hazard) : Category 2

**B. GHS label elements, including precautionary statements**

**Pictogram and symbol :**



**Signal word :** Warning

**Hazard statements :**

H317 May cause an allergic skin reaction.

H401 Toxic to aquatic life.

**Precautionary statements**

**Precaution**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Treatment**

P302+P352 If on skin: Wash with plenty of soap and water.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

**Storage :** Not applicable

**Disposal**

P501 Dispose the contents/container in accordance with local/regional/national/international regulations.

**C. Other hazard information not included in hazard classification (NFPA)**

**Health** 2

**Flammability** Not available

**Reactivity** Not available

## 3. Composition/information on ingredients

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)
Water	Water	7732-18-5	231-791-2	< 95.00 %
CARRAGEENAN	-	9000-07-01	-	< 5.00 %
Fragrance	Fragrance Mixture	-	-	< 5.00 %

#### 4. First aid measures

##### A. Eye contact

- Call emergency medical service.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

##### B. Skin contact

- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.
- Call emergency medical service.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.

##### C. Inhalation

- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Keep victim warm and quiet.

##### D. Ingestion

- Call emergency medical service.

##### E. Indication of immediate medical attention and notes for physician

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

#### 5. Fire fighting measures

##### A. Suitable (and unsuitable) extinguishing media

- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- Use dry sand or earth to smother fire.

##### B. Specific hazards arising from the chemical

- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.
- Fire will produce irritating, corrosive and/or toxic gases.

##### C. Special protective equipment and precautions for fire-fighters

- Rescuers should put on appropriate protective gear.
- Evacuate area and fight fire from a safe distance.
- Substance may be transported in a molten form.
- 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; Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- 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.
- Fire involving Tanks; For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## 6. Accidental release measures

### A. Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Clean up spills immediately, observing precautions in Protective Equipment section.
- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Cover with plastic sheet to prevent spreading.
- Prevent dust cloud.
- Please note that there are materials and conditions to avoid.

### B. Environmental precautions and protective procedures

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

### C. The methods of purification and removal

- Absorb spills with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Absorb the liquid and scrub the area with detergent and water.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
- Powder Spill; Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Small Spill; Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

## 7. Handling and storage

### A. Precautions for safe handling

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Avoid prolonged or repeated contact with skin.
- Please note that there are materials and conditions to avoid.
- Please work with reference to engineering controls and personal protective equipment.

### B. Conditions for safe storage

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

## 8. Exposure controls/personal protection

### A. Occupational Exposure limits

- Korea regulation** : Not available
- ACGIH regulation** : Not available
- Biological exposure index** : Not available
- OSHA regulation** : Not available
- NIOSH regulation** : Not available
- EU regulation** : Not available
- Other** : Not available

### B. Appropriate engineering controls

### C. Personal protective equipment

- 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 breathing apparatus.oxygen

**Eye protection**

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

**Hand protection**

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

**Body protection**

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

## 9. Physical and chemical properties

**A. Appearance****Description** Solid**Color** Milky-White**B. Odor** Aromatic Odor**C. Odor threshold** Not available**D. pH** Not available**E. Melting point/freezing point** Not available**F. Initial boiling point and boiling range** Not available**G. Flash point** Not available**H. Evaporation rate** Not available**I. Flammability (solid, gas)** Not applicable**J. Upper/lower flammability or explosive limits** Not available**K. Vapor pressure** Not available**L. Solubility (ies)** Not available**M. Vapor density** Not available**N. Specific gravity** Not available**O. Partition coefficient: n-octanol/water** Not available**P. Auto ignition temperature** Not available**Q. Decomposition temperature** Not available**R. Viscosity** Not available**S. Molecular weight** Not available

## 10. Stability and reactivity

**A. Chemical stability and Possibility of hazardous reactions:**

- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.
- Fire will produce irritating, corrosive and/or toxic gases.

**B. Conditions to avoid:**

- Heat, sparks or flames

**C. Incompatible materials:**

- Combustibles, reducing agents

**D. Hazardous decomposition products:**

- Corrosive and/or toxic fume
- Irritating, corrosive and/or toxic gases

## 11. Toxicological information

### A. Information of Health Hazardous:

#### Acute toxicity

**Oral** [Not classified] (ATEmix = 1,417,000 mg/kg bw)

- **CARRAGEENAN** : Rat LD<sub>50</sub> > 5,000 mg/kg

**Dermal** [Not classified] (ATEmix = 25,000 mg/kg bw)

**Inhalation** [Not classified]

**Skin corrosion/ irritation** [Not available]

- **CARRAGEENAN** : May be irritant for sensitive persons.

**Serious eye damage/ irritation** [Not available]

- **CARRAGEENAN** : May be irritant for sensitive persons.

- **fragrance** : Skin or eyes may cause irritation.

**Respiratory sensitization** [Not classified]

**Skin sensitization** [Category 1]

- **fragrance** : May cause skin irritation.

**Carcinogenicity** [Not classified]

KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008: not listed

**Mutagenicity** [Not classified]

**Reproductive toxicity** [Not classified]

**Specific target organ toxicity (single exposure)** [Not classified]

**Specific target organ toxicity (repeat exposure)** [Not classified]

**Aspiration Hazard** [Not classified]

## 12. Ecological information

### A. Ecological toxicity

- Acute toxicity : [Category 2] (ATEmix = 4.77000mg/ℓ)

- Chronic toxicity : [Not available]

**Fish** Not available

**Crustacean** Not available

**Algae** Not available

### B. Persistence and degradability

**Persistence** Not available

**Degradability** Not available

### C. Bioaccumulative potential

**Bioaccumulation** Not available

**Biodegradation** Not available

### D. Mobility in soil

Not available

### E. Other hazardous effect

Not available

## 13. Disposal considerations

### A. Disposal method

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

### B. Disposal precaution

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

## 14. Transport information

### A. UN Number

Not applicable

- B. UN Proper shipping name** Not applicable
- C. Transport Hazard class** Not applicable
- D. Packing group** Not applicable
- E. Marine pollutant** Not applicable
- F. Special precautions**
  - in case of fire** Not applicable
  - in case of leakage** Not applicable

## 15. Regulatory information

- A. Occupational Safety and Health Regulation** Not regulated
- B. Toxic Chemical Control Act**
  - Water** : Existing Chemical Substance (KE-35400)
- C. Dangerous Material Safety Management Regulation** Not regulated
- D. Wastes Control Act** Not regulated
- E. Other regulation (internal and external)**
  - Internal information**
    - Persistent Organic Pollutants Acts** Not regulated
  - External information**
    - EU classification(classification)**
      - Water** : Classification Not classified
    - EU classification(risk phrases)**
      - Water** : Hazard statements Not applicable
    - EU classification(safety phrases)**
      - Water** : Precautionary statements Not applicable
    - EU SVHC list** Not regulated
    - EU Authorisation List** Not regulated
    - EU Restriction list** Not regulated
    - U.S.A management information (OSHA Regulation)** Not regulated
    - U.S.A management information (CERCLA Regulation)** Not regulated
    - U.S.A management information (EPCRA 302 Regulation)** Not regulated
    - U.S.A management information (EPCRA 304 Regulation)** Not regulated
    - U.S.A management information (EPCRA 313 Regulation)** Not regulated
    - Substance of Roterdame Protocol** Not regulated
    - Substance of Stockholme Protocol** Not regulated
    - Substance of Montreal Protocol** Not regulated
  - Foreign Inventory Status**
    - Water**
      - U.S.A management information Section 8(b) Inventory (TSCA): Present
      - Japan management information Industrial Safety and Health Law Substances (ISHL): 2-(4)-1220
      - China management information Inventory of Existing Chemical Substances (IECSC): Present 32224
      - Canada management information Domestic Substances List (DSL): Present
      - Australia management information Inventory of Chemical Substances (AICS): Present
      - New Zealand management information Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
      - Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present

## 16. Other information

- A. Information source and references**
  - AKRON; <http://ull.chemistry.uakron.edu/erd> (Description) , (Color) , (Melting point/freezing point) , (Initial boiling point and boiling range) , (Vapor pressure) , (Vapor density) , (Specific gravity) , (Viscosity) , (Molecular weight)
  - American Conference of Governmental Industrial Hygienists TLVs and BEIs.
  - EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>
  - IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
  - Korea Occupational Health & Safety Agency; <http://www.kosha.net>

NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>  
 National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>  
 National Emergency Management Agency-Korea dangerous material inventory management system;  
<http://www.nema.go.kr/hazmat/main/main.jsp>  
 National Toxicology Program; [http://ntp-apps.niehs.nih.gov/ntp\\_tox/index.cfm](http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm)  
 TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>  
 Waste Control Act enforcement regulation attached [1]  
 MSC CO., LTD. MSDS (Description) , (Color) , (Odor) , (Odor threshold) , (pH) , (Melting point/freezing point) , (Initial boiling point and boiling range) , (Flash point) , (Upper/lower flammability or explosive limits) , (Vapor pressure) , (Solubility (ies)) , (Vapor density) , (Specific gravity) , (Oral) , (Skin corrosion/ irritation) , (Serious eye damage/ irritation)  
 American Conference of Governmental Industrial Hygienists TLVs and BEIs.  
 DONGNAM MSDS (pH) , (Vapor density) , (Molecular weight)  
 EPISUITE v4.1; <http://www.epa.gov/opt/exposure/pubs/episuitedl.htm> (Partition coefficient: n-octanol/water) , (Persistence) , (Bioaccumulation) , (Mobility in soil)  
 EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>  
 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>  
 Korea Occupational Health & Safety Agency; <http://www.kosha.net>  
 NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>  
 National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>  
 National Emergency Management Agency-Korea dangerous material inventory management system;  
<http://www.nema.go.kr/hazmat/main/main.jsp>  
 National Toxicology Program; [http://ntp-apps.niehs.nih.gov/ntp\\_tox/index.cfm](http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm)  
 TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>  
 The Chemical Database -The Department of Chemistry at the University of Akron;  
<http://ull.chemistry.uakron.edu/erd/> (Description) , (Color) , (Odor) , (Melting point/freezing point) , (Initial boiling point and boiling range) , (Flash point) , (Vapor pressure) , (Solubility (ies)) , (Specific gravity) , (Auto ignition temperature) , (Viscosity)  
 Waste Control Act enforcement regulation attached [1]  
 Fragrance MSDS  
 ECOTOX; <http://cfpub.epa.gov/ecotox/>  
 Emergency Response Guidebook 2008;  
[http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008\\_eng.pdf](http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008_eng.pdf)  
 International Chemical Safety Cards(ICSC)(<http://www.hihs.go.jp/ICSC>)  
 International Programme on Chemical Safety(IPCS) International Chemical Safety Cards (ICSCs);  
<http://www.inchem.org/>  
 International Uniform Chemical Information Database(IUCLID); <http://esis.jrc.ec.europa.eu/>  
 Korea Occupational Health & Safety Agency; <http://www.kosha.net>  
 National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>  
 National Emergency Management Agency-Korea dangerous material inventory management system;  
<http://www.nema.go.kr/hazmat/main/main.jsp>  
 National Institute of Technology and Evaluation(NITE); <http://www.safe.nite.go.jp/english/db.html>  
 TOMES; <http://www.rightanswerknowledge.com/loginRA.asp>  
 The Chemical Database -The Department of Chemistry at the University of Akron;  
<http://ull.chemistry.uakron.edu/erd/>  
 U.S. National library of Medicine(NLM) Hazardous Substances Data Bank(HSDB);  
<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>  
 UN Recommendations on the transport of dangerous goods 17th  
 Waste Control Act enforcement regulation attached [1]

**B. Issuing date** 2013.12.10

**C. Revision number and date**

**revision number**

**date of the latest revision**

**D. Others**

- Revised Material Safety Data Sheet based on the amendments made on the Ministry of Employment and Labor Public Notice on Standard for Classification Labeling of Chemical Substance and Material Safety Data Sheet.
- This MSDS is authored in pursuant to the Article 41 of the Occupational Safety and Health Act.
- The content is based on the latest information and knowledge that we currently possess.

•This MSDS was authored to aid buyer, processor or any other third person who handles the chemical of subject in the MSDS; additionally, it does not warrant suitability of the chemical for special purposes or the commercial use of statements that approves the use of it in combination with other chemicals as well as technical or legal liabilities.