

MATERIAL SAFETY DATA SHEET

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

A. GHS product identifier POLA FAMILY VENT CLIP TYPE PENGU_HERB

B. Recommended use of the chemical and restrictions on use

Recommended use Air freshener for car air vents

Restrictions on use Use only as intended

C. Manufacturers

Company name Bullsone

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Emergency phone number 822-2106-7777

Respondent Han Dong Jin

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2. Hazards identification

A. GHS classification of the substance/mixture

Flammable liquids : Category 3

Acute toxicity (oral) : Category 5

Skin sensitization : Category 1

Hazardous to the aquatic environment (chronic) : Category 2

B. GHS label elements, including precautionary statements

Pictogram and symbol :



Signal word :Warning

Hazard statements :

H226 Flammable liquid and vapour

H303 May be harmful if swallowed.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Precaution

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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.

P303+P361+P353 If on skin (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P312 Call a poison center or doctor/physician if you feel unwell.

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.

P370+P378 In case of fire: Use Alcohol foam / carbon dioxide / water spray / dry sand or soil for extinction.

P391 Collect spillage.

Storage

P403+P235 Store in a well-ventilated place. Keep cool.

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 1

Reactivity Not available

3. Composition/information on ingredients

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)
Fragrance	Fragrance Mixture	-	-	100 %

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 on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- Call emergency medical service.
- Remove and isolate contaminated clothing and shoes.
- For minor skin contact, avoid spreading material on unaffected skin.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Wash skin with soap and water.

C. Inhalation

- Move victim to fresh air.
- Keep victim warm and quiet.

D. Ingestion

- Call emergency medical service.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

- Flammable liquid and vapour
- May violently polymerize and result in fire and explosion.
- Vapors may travel to a source of ignition and ignite.
- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- May form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- Spilled material may create fire or explosion hazard.
- May cause vapor explosion hazard indoors, outdoors or in sewers.
- Some of these materials may burn, but none ignite readily.
- Vapors may form explosive mixtures with air.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.

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.
- Many liquids are lighter than water.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas
- Substance may be transported hot.
- Substance may be transported in a molten form.
- Some may be transported hot.
- 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.
- The very fine particles may cause a fire or explosion, eliminate all ignition sources.
- Clean up spills immediately, observing precautions in Protective Equipment section.
- Eliminate all ignition sources.
- All equipment used when handling the product must be grounded.
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- A vapor suppressing foam may be used to reduce vapors.
- 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

- Avoid release to the environment.
- Prevent entry into waterways, sewers, basements or confined areas.

C. The methods of purification and removal

- Collect spillage.
- Dike and collect water used to fight fire.
- 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.
- Use clean non-sparking tools to collect absorbed material.

- 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

- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash ... thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Avoid prolonged or repeated contact with skin.
- All equipment used when handling the product must be grounded.
- Please note that there are materials and conditions to avoid.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.
- Be careful to heat.
- You need measurement of air concentration and ventilation in low, closed and confined areas due to lack of oxygen.

B. Conditions for safe storage

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- 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

- Facilities for storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

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 gaseous/liquid material, the respiratory protective equipments as follow are recommended. escape full facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or escape half facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or direct full facepiece gas mask (of use for acid gas, in case of acid gas for organic

compounds) half facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or powered air-purifying gas mask.

- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained breathing apparatus.oxygen

Eye protection

- Wear enclosed safety goggles to protect from gaseous state organic 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 Liquid

Color Almost colorless, Pale yellow

B. Odor Aromatic Odor

C. Odor threshold Not applicable

D. pH Not available

E. Melting point/freezing point 60 °C

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 1,6077hPa at 20 °C Calculated (97,9 %)

L. Solubility (ies) Not applicable

M. Vapor density Not available

N. Specific gravity 0.8970 - 0.9070(d20/20)

O. Partition coefficient: n-octanol/water Not applicable

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:

- Flammable liquid and vapour
- May violently polymerize and result in fire and explosion.
- May form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- Spilled material may create fire or explosion hazard.
- May cause vapor explosion hazard indoors, outdoors or in sewers.
- Some of these materials may burn, but none ignite readily.
- Vapors may form explosive mixtures with air.
- 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:

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

C. Incompatible materials:

- Combustibles, reducing agents

D. Hazardous decomposition products:

- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- Corrosive and/or toxic fume
- Irritating and/or toxic gases

11. Toxicological information**A. Information of Health Hazardous:****Acute toxicity**

Oral [Category 5] (ATEmix = 2,442 mg/kg bw)

- **Fragrance** : Rat LD₅₀ = 2,442 mg/kg (Estimate)

Dermal [Not classified] (ATEmix = 15,000 mg/kg bw)

- **Fragrance** : LD₅₀ = 15,000 mg/kg (Estimate)

Inhalation [Not classified]

Skin corrosion/ irritation [null]

-**Fragrance** : Will cause skin irritation or dermatitis.

Serious eye damage/ irritation [null]

-**Fragrance** : Can cause irreversible damage to the eye.

Respiratory sensitization [Not available]

Skin sensitization [Category 1]

Carcinogenicity [Not classified]

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

Mutagenicity [Not available]

Reproductive toxicity [Not available]

Specific target organ toxicity (single exposure) [Not available]

Specific target organ toxicity (repeat exposure) [Not available]

Aspiration Hazard [Not available]

12. Ecological information**A. Ecological toxicity**

- Acute toxicity : [Not classified]

- Chronic toxicity : [Category 2]

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

- **Fragrance** : If the event of unprofessional handling or disposal environmental hazard can not be excluded. Toxic to aquatic long-term affects.

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 1993
- B. UN Proper shipping name FLAMMABLE LIQUID, N.O.S.
- C. Transport Hazard class 3
- D. Packing group III
- E. Marine pollutant YES
- F. Special precautions
 - in case of fire F-E
 - in case of leakage S-E

15. Regulatory information

- A. Occupational Safety and Health Regulation Not regulated
- B. Toxic Chemical Control Act
 - Fragrance** : Existing Chemical Substance ; CAS No. 115-95-7; KE-11622/ CAS No. 78-70-6; KE-11592/ CAS No. 88-41-5; KE-04259/ CAS No. 142-92-7; KE-00050/ CAS No. 470-82-6; KE-34618/ CAS No.18479-58-8; KE-11665; CAS No. 140-11-4; KE-02778/ CAS No. 125-12-2; KE-34421/ CAS No. 123-68-2; KE-19809/ CAS No. 80-54-6; KE-11394/ CAS No. 97-62-1; KE-13946/ CAS No. 5392-40-5; KE-11579
 - Fragrance** :Non-Toxic Chemicals CAS No. 14765-30-1 / CAS No. 238402-46-5 / CAS No. 56973-85-4
- C. Dangerous Material Safety Management Regulation
 - Fragrance** : Dangerous Material Safety Management Regulation CAS No. 115-95-7; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 78-70-6; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 142-92-7; Petroleum class 4-2 (non-water soluble liquid) 1000ℓ / CAS No. 470-82-6; Petroleum class 4-2 (non-water soluble liquid) 1000ℓ / CAS No. 18479-58-8; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 140-11-4; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 125-12-2; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 123-68-2; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 80-54-6; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 97-62-1; Petroleum class 4-1 (non-water soluble liquid) 200ℓ
- 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)** Not regulated
 - EU classification(risk phrases)** Not regulated
 - EU classification(safety phrases)** Not regulated
 - 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**

16. Other information

A. Information source and references

Waste Control Act enforcement regulation attached [1]
 Emergency Response Guidebook 2008;
http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008_eng.pdf
 Givaudan MSDS (Description) , (Color) , (Odor) , (Flash point) , (Vapor pressure) , (Solubility (ies)) ,
 (Specific gravity) , (Oral) , (Dermal)
 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>
 UN Recommendations on the transport of dangerous goods 17th
 Waste Control Act enforcement regulation attached [1]

B. Issuing date 2013.10.17

C. Revision number and date

revision number 1

date of the latest revision 2014.07.16

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.