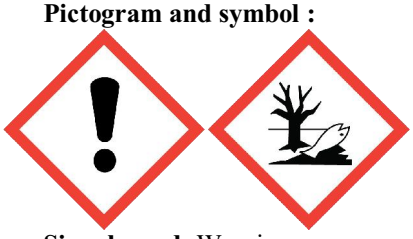
MATERIAL SAFETY DATA SHEET

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

A. GHS product identifier POLA FAMILY MODERN VENT CLIP TYPE SPARKING ZEST
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
Address 7F, Dabong Tower, 418, Teheran-roGangnam-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 (chronic) : Category 2
B. GHS label elements, including precautionary statements
Pictogram and symbol :



Signal word : Warning
Hazard statements :
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
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 Actions by referring to thefirst aidinstructions on theadditionallabel.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
Storage :Avoid exposure to extreme temperatures. Avoid prolonged contact with certain plastic materials (PVC)
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	;Alkanes, C11-15-iso-(CAS No. 90622-58-5) +α-hexylcinnamaldehyde(CAS No. 101-86-0) +2,6-dimethyloct-7-en-2-ol(CAS No. 18479-58-8) +3-Octanol, 3,7-dimethyl-(CAS No. 78-69-3) +7-hydroxycitronellal(CAS No. 107-75-5) +2-(4-tert-butylbenzyl)propionaldehyde(CAS No. 80-54-6) +4-tert-butylcyclohexyl acetate(CAS No. 32210-23-4) +Terpineol(CAS No. 8000-41-7) +2,6-di-tert-butyl-p-cresol(CAS No. 128-37-0) +citronellol(CAS No. 106-22-9) +2-benzylideneheptanal(CAS No. 122-40-7) +geraniol(CAS No. 106-24-1) +2-phenylethanol(CAS No. 60-12-8) +3-p-cumenyl-2-methylpropionaldehyde(CAS No. 103-95-7) +undecan-4-olide(CAS No. 104-67-6) +geranyl acetate(CAS No. 105-87-3) +Eugenol(CAS No. 97-53-0) +isopentyl salicylate(CAS No.87-20-7) +Hexyl acetate(CAS No. 142-92-7) +diphenyl ether(CAS No. 101-84-8) +undec-10-enal(CAS No. 112-45-8) +allylhexanoate(CAS No. 123-68-2) +2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol(CAS No. 28219-61-6)			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 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

- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- 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.

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.
- 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.
- 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

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

C. The methods of purification and removal

- Collect spillage.
- 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.
- Wash ... thoroughly after handling.
- 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.
- Be careful to high temperature.

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

Fragrance ; CAS No. 128-37-0; TWA=2 mg/m³/ CAS No. 101-84-8; TWA = 1 ppm, STEL = 2 ppm

Biological exposure index : Not available

OSHA regulation

Fragrance CAS No. 101-84-8; TWA = 1 ppm (7 mg/m³)

NIOSH regulation

Fragrance CAS No. 128-37-0; TWA= 10 mg/m³/ CAS No. 101-84-8; TWA = 1 ppm (7 mg/m³)

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 Colorless To Pale Yellow
B. Odor Characteristic
C. Odor threshold Not available
D. pH Not available
E. Melting point/freezing point Not available
F. Initial boiling point and boiling range > 35 ℃
G. Flash point 68 ℃
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 0.8620~0.8820(20℃
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:
- 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 [Not classified] (ATEmix = 37,459 mg/kg bw)

- **Fragrance** : LD_{50} = 37,459 mg/kg

Dermal [Not classified] (ATEmix = 181,422 mg/kg bw)

- **Fragrance** : LD_{50} = 181,422 mg/kg

Inhalation [Not classified]

Skin corrosion/ irritation [null]

Serious eye damage/ irritation [null]

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 available]
- Chronic toxicity : [Category 2]

Fish Not available

crustaceanNot 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 3082

B. UN Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

C. Transport Hazard class 9

D. Packing group III
E. Marine pollutant YES
F. Special precautions
in case of fire F-A
in case of leakage S-F

15. Regulatory information

A. Occupational Safety and Health Regulation
Fragrance : Occupational exposure limits listed
Fragrance : Occupational exposure limits listed
Fragrance : Occupational exposure limits listed
B. Toxic Chemical Control Act
Fragrance : Existing Chemical Substance ; CAS No. 90622-58-5: KE-00533/CAS No. 101-86-0: KE-28401/ CAS No. 18479-58-8: KE-11665/ CAS No. 78-69-3: KE-11637/ CAS No. 107-75-5: KE-20434/ CAS No. 80-54-6: KE-11394/ CAS No. 32210-23-4: KE-11375/ CAS No. 8000-41-7: KE-33197/ CAS No. 128-37-0: KE-03079/ CAS No. 106-22-9: KE-11671/ CAS No. 122-40-7: KE-28400/ CAS No. 106-24-1: KE-11596/ CAS No. 60-12-8: KE-28354/ CAS No. 103-95-7
Fragrance : Non-Toxic Chemicals ; CAS No. 28219-61-6: 2000-3-1536
C. Dangerous Material Safety Management Regulation
Fragrance : Dangerous Material Safety Management Regulation CAS No. 101-86-0; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ / CAS No. 18479-58-8; Petroleum class 4-3 (non-water soluble liquid) 2000ℓ/ CAS No. 78-69-3; Petroleum class 4-3 (non-water soluble liquid)/ CAS No. 107-75-5; 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.32210-23-4; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 8000-41-7; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 128-37-0; Non-dangerous goods/ CAS No. 106-22-9; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 122-40-7; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 106-24-1; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 60-12-8; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 103-95-7; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 104-67-6; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 105-87-3; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 97-53-0; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/CAS No. 87-20-7; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 142-92-7; Petroleum class 4-2 (non-water soluble liquid)/ CAS No. 101-84-8; Non-dangerous goods/ CAS No. 112-45-8; Petroleum class 4-3 (non-water soluble liquid)2000ℓ/ CAS No. 123-68-2; Petroleum class 4-3 (non-water soluble liquid)2000ℓ
D. Wastes Control Act Not regulated
E. Other regulation (internal and external)
Internal information
Persistant 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
B. Issuing date 2014.01.08
C. Revision number and date
revision number 2014.07.16
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.