

SAFETY DATA SHEET

According to OSHA Hazcom Standard 29 CFR 1910.1200

WINE HP-BB19422

Date of issue: 2022-06-09 Revision date: Not applicable Version: 1.0

1. IDENTIFICATION

A. Product name

- WINE HP-BB19422

B. Recommended use and restriction on use

General use : Fragrance for consumer product.
 Restriction on use : Do not use it other than intended use.

C. Manufacturer / Supplier / Distributor information

o Manufacturer information

- Company name :: Hanbit Flavor & Fragrance Co., Ltd

- Address : 67 Daesosandan-ro, Daeso-Myeon, Eumseong-Gun, Chungbuk, Korea

- Emergency telephone number : 043-537-0527

o Supplier/Distributer information

- Company name :: Hanbit Flavor & Fragrance Co., Ltd

- Address : 67 Daesosandan-ro, Daeso-Myeon, Eumseong-Gun, Chungbuk, Korea

- Emergency telephone : 043-537-0527

number

2. HAZARD IDENTIFICATION

A. GHS Classification

- Flammable liquids: Category4

- Acute toxicity (inhalation: vapor): Category4- Skin corrosion/irritation: Category2

- Serious eye damage/irritation : Category2A

B. GHS label elements

• Hazard symbols



o Signal words

- Warning

O Hazard statements

- H227 Combustible liquid
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled

o Precautionary statements

1) Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- $P280 \ Wear \ protective \ gloves/protective \ clothing/eye \ protection/face \ protection/hearing \ protection.$

2) Response

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash before reuse.
- P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).

3) Storage

- P403 Store in a well-ventilated place.

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification

- Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
DIPROPYLENE GLYCOL	Propanol, oxybis-; Oxydipropanol; 1-(1- Hydroxypropoxy)propan-1-ol	25265-71-8	55-60
METHYL ANTHRANILATE	-	134-20-3	10-15
PHENOXY EHTYL	-	103-60-6	1-5
PHENYL ETHYL ALCOHOL	Phenethyl alcohol; Phenylethyl alcohol; 2-Phenylethane-1-ol; Benzeneethanol; 2-Phenylethanol; b-Phenylethylalcohol; PHENYLETHYL ALCOHOL; PHENYLETHANOL; b-PHENYLETHYL ALCOHOL; (2-Hydroxyethyl)benzene;	60-12-8	1-5
ETHYL LINALOOL	-	10339-55-6	1-5
ETHYL BUTYRATE	-	105-54-4	1-5
ISOAMYL ACETATE	Isoamyl acetate; Amyl acetate ester; 3-Methylbutyl ethanoate; Isopentyl acetate; 1-acetoxy-3-methylbutane; 1-Butanol, 3-methyl-, 1-acetate; 3-Methyl-1-butanol acetate; ACETATE, 3-METHYLBUTYL; ACETATE, ISOAMYL; ISO-PENTYL ACETATE	123-92-2	1-5
ETHYL PROPIONATE	-	105-37-3	1-5
ETHYL CAPROATE	-	123-66-0	1-5
DAMASCENONE	-	23726-93-4	0.1-1

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Remove contact lenses if worn.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Wash thoroughly after handling.

C. Inhalation contact

- Take specific treatment if needed.
- When exposed to large amounts of steam and mist, move to fresh air.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.

- Rinse your mouth with water immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Avoid use of water jet for extinguishing
- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

B. Specific hazards arising from the chemical

- Causes serious eye irritation
- Causes skin irritation
- Combustible liquid
- Harmful if inhaled

C. Special protective actions for firefighters

- Avoid inhalation of materials or combustion by-products.
- Cool containers with water until well after fire is out.
- Do not approach the tank surrounded by fire until it is extinguished.
- In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.
- Keep unauthorized personnel out.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Do not touch spilled material. Stop leak if you can do it without risk.
- Handle the damaged containers or spilled material after wearing appropriate protective equipment
- Move container to safe area from the leak area.
- Must work against the wind, let the upwind people to evacuate.
- Remove all sources of ignition.

B. Environmental precautions

- If large amounts have been spilled, inform the relevant authorities.
- Prevent runoff and contact with waterways, drains or sewers.

C. Methods and materials for containment and cleaning up

- Appropriate container for disposal of spilled material collected.
- Dike for later disposal.
- Disposal of waste shall be in compliance with the Wastes Control Act
- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notify the central and local government if the emission reach the standard threshold.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Avoid contact with incompatible materials.
- Avoid direct physical contact.
- Comply with all applicable laws and regulations for handling
- Dealing only with a well-ventilated place.
- Do not handle until all safety precautions have been read and understood.

B. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight.
- Check regularly for leaks.
- Do not apply any physical shock to container.

- Do not apply direct heat.
- Do not use damaged containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

o ACGIH TLV

- [ISOAMYL ACETATE]: TWA 50 ppm (266 mg/m3) STEL 100 ppm (532 mg/m3)

OSHA PEL

- [ISOAMYL ACETATE]: 525

B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

C. Individual protection measures, such as personal protective equipment

o Respiratory protection

- Any air-purifying respirator with a full facepiece and an organic vapor canister.
- Any chemical cartridge respirator with a full facepiece and organic vaporcartridge(s).
- Any chemical cartridge respirator with organic vapor cartridge(s).
- Consider warning properties before use.
- For Unknown Concentration or Immediately Dangerous to Life or Health: Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
- Respiratory protection is ranked in order from minimum to maximum.
- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.

o Eye protection

- Provide an emergency eye wash station and quick drench shower in the immediate work area.
- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.

• Hand protection

- Wear appropriate chemical resistant glove.

$\circ \ Skin \ protection$

- Wear appropriate chemical resistant protective clothing.

o Others

- Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid
- Color	COLORLESS ~ YELLOW / GREEN
B. Odor	Characteristic
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	> 85°C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Soluble in alcohol
M. Vapour density	Not available
N. Specific gravity(Relative density)	1.015±0.010
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	Not available
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	Not available

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

C. Conditions to avoid

- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces
- Avoid contact with incompatible materials and condition.

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- o Respiratory tracts
 - Not available
- o Oral
 - Not available
- o Eye·Skin
 - Causes serious eye irritation
 - Causes skin irritation

B. Delayed and immediate effects and also chronic effects from short and long term exposure

o Acute toxicity

* Oral

- Product (ATEmix) : >5000mg/kg
- [DIPROPYLENE GLYCOL] : LD50 = 14850 mg/kg Rat (MOE Safety test)
- [METHYL ANTHRANILATE]: LD50 2910 mg/kg Rat
- [PHENOXY EHTYL ISOBUTYRATE]: LD50 > 5000 mg/kg Rat (ChemIDplus)
- [PHENYL ETHYL ALCOHOL]: LD50 2230 mg/kg Rat
- [ETHYL BUTYRATE]: LD50 13000 mg/kg Rat (NLM, THOMSON)
- [ISOAMYL ACETATE] : LD50 = 16600 mg/kg Rat
- [ETHYL PROPIONATE] : LD50 8732 mg/kg Rat (NLM)
- [ETHYL CAPROATE] : LD50 20000 $\,\mathrm{mg/kg}$ Rat

* Dermal

- Product (ATEmix): 2000mg/kg < ATEmix <= 5000mg/kg
- [DIPROPYLENE GLYCOL]: LD50 > 5000 mg/kg Rabbit (HSDB)
- [PHENOXY EHTYL ISOBUTYRATE]: LD50 > 5000 mg/kg Rabbit (ChemIDplus)
- [PHENYL ETHYL ALCOHOL]: LD50 5000 mg/kg Rabbit
- [ETHYL BUTYRATE] : LD50 > 2000 mg/kg Rabbit (NLM)
- [ISOAMYL ACETATE] : LD50 > 5000 mg/kg Rabbit

* Inhalation

- Product (ATEmix) : 0.5mg/L < ATEmix <= 2.0mg/L
- [PHENYL ETHYL ALCOHOL] : dust LC50 >4.63 $\,\mathrm{mg}/\ell$ 4 hr Rat

O Skin corrosion/irritation

- Causes skin irritation

o Serious eye damage/irritation

- Causes serious eye irritation

o Respiratory sensitization

- Not available
- Skin sensitization

- Not available
- o Carcinogenicity
 - * IARC
 - Not available
 - * OSHA
 - Not available
 - * ACGIH
 - Not available
 - * NTP
 - Not available
 - * EU CLP
 - Not available
- o Germ cell mutagenicity
 - Not available
- o Reproductive toxicity
 - Not available
- o STOT-single exposure
 - Not available
- o STOT-repeated exposure
 - Not available
- o Aspiration hazard
 - Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

- Fish
 - [DIPROPYLENE GLYCOL] : LC50 = 1888.3 mg/ℓ 96 hr (ECOTOX)
 - [METHYL ANTHRANILATE]: LC50 9.12 mg/l 96 hr Brachydanio rerio (ECOTOX)
 - [PHENOXY EHTYL ISOBUTYRATE] : LC50 7.450 mg/ℓ 96 hr (Estimate)
 - [PHENYL ETHYL ALCOHOL] : LC50 220 ~ 460 mg/ ℓ 96 hr Leuciscus idus (DIN 38412, IUCLID)
 - [ETHYL LINALOOL] : LC50 1.71 mg/ℓ 96 hr (Estimate)
 - [ETHYL BUTYRATE] : LC50 53 mg/ ℓ 48 hr (ECOTOX)
 - [ISOAMYL ACETATE]: LC50 22 ~ 46 mg/l 96 hr Brachydanio rerio (OECD Guideline 203) (ECHA)
 - [ETHYL PROPIONATE]: LC50 34.007 mg/ ℓ 96 hr (Estimate)
 - [ETHYL CAPROATE]: LC50 8.94 mg/ ℓ 96 hr Pimephales promelas (ECOTOX)
 - [DAMASCENONE]: LC50 1.983 mg/l 96 hr (Estimate)
- o Crustaceans
 - [DIPROPYLENE GLYCOL]: LC50 = 1841.9 mg/ℓ 48 hr Daphnia magna (ECOTOX)
 - [METHYL ANTHRANILATE] : EC50 18.2 mg/ ℓ 48 hr Daphnia magna (ECOTOX)
 - [PHENOXY EHTYL ISOBUTYRATE] : LC50 6.3 \mbox{mg}/ℓ 48 hr (Estimate)
 - [PHENYL ETHYL ALCOHOL] : EC50 287.17 mg/ ℓ 48 hr Daphnia magna (IUCLID)
 - [ETHYL LINALOOL] : LC50 0.278 mg/ℓ 48 hr (Estimate)
 - [ETHYL BUTYRATE] : EC50 750 mg/ ℓ 24 hr Daphnia magna (ECOTOX)
 - [ISOAMYL ACETATE] : $EC50 = 205 \text{ mg/}\ell 24 \text{ hr (NITE)}$
 - [ETHYL PROPIONATE]: LC50 120 mg/ ℓ 48 hr Daphnia magna (ECOTOX)
 - [ETHYL CAPROATE] : LC50 20.124 mg/ℓ 48 hr (Estimate)
 - [DAMASCENONE]: LC50 1.494 mg/ℓ 48 hr (Estimate)
- o Algae
 - [DIPROPYLENE GLYCOL] : EC50 = 1064.8 mg/ℓ 96 hr (ECOTOX)
 - [PHENOXY EHTYL ISOBUTYRATE] : EC50 5.134 mg/ℓ 96 hr (Estimate)
 - [PHENYL ETHYL ALCOHOL] : EC50 490 mg/ł 72 hr Scenedesmus subspicatus (test method DIN 38412) (IUCLID)
 - [ETHYL LINALOOL] : EC50 2.03 mg/ℓ 96 hr (Estimate)
 - [ETHYL BUTYRATE]: EC50 1.675 mg/ ℓ 96 hr (Estimate)
 - [ETHYL PROPIONATE]: EC50 2.644 mg/ ℓ 96 hr (Estimate)
 - [ETHYL CAPROATE] : EC50 0.645 mg/ℓ 96 hr (Estimate)
 - [DAMASCENONE]: EC50 1.594 mg/ ℓ 96 hr (Estimate)

B. Persistence and degradability

o Persistence

- [DIPROPYLENE GLYCOL]: log Kow = -1.07 (Estimate)
- [METHYL ANTHRANILATE]: log Kow 1.88
- [PHENOXY EHTYL ISOBUTYRATE]: log Kow 3.01 (Estimate)
- [PHENYL ETHYL ALCOHOL]: log Kow 1.36
- [ETHYL LINALOOL] : log Kow = 3.87 (Estimate)
- [ETHYL BUTYRATE]: log Kow 1.85 (Estimate)
- [ISOAMYL ACETATE]: log Kow 2.13 log Kow 2.7 (OECD TG 117, GLP) (ECHA)
- [ETHYL PROPIONATE]: log Kow 1.21
- [ETHYL CAPROATE]: log Kow 2.83 (estimate) (ChemIDplus)
- [DAMASCENONE]: log Kow 4.21 (Estimate)

o Degradability

- Not available

C. Bioaccumulative potential

o Bioaccumulative potential

- [DIPROPYLENE GLYCOL] : BCF $0.3 \sim 1.4$ (IUCLID)
- [METHYL ANTHRANILATE]: BCF 5.592 (Estimate)
- [PHENOXY EHTYL ISOBUTYRATE]: BCF 45 (Estimate)
- [PHENYL ETHYL ALCOHOL]: BCF 6 (HSDB)
- [ETHYL LINALOOL]: BCF = 166.7 (Estimate)
- [ETHYL BUTYRATE]: BCF 12 (HSDB)
- [ISOAMYL ACETATE]: BCF 28.1 (ECHA)
- [ETHYL PROPIONATE]: BCF 1.7 (HSDB)
- [DAMASCENONE]: BCF 277.8 (Estimate)

o Biodegradation

- [DIPROPYLENE GLYCOL]: 16 (%) 28 day (IUCLID)
- [PHENOXY EHTYL ISOBUTYRATE]: Non-degradable; not degraded and has a high potential to accumulate in vivo (estimate)
- [PHENYL ETHYL ALCOHOL]: BOD 87%, 2weeks (MITI test) (HSDB)
- [ISOAMYL ACETATE]: 88 %, 28 day (OECD TG 301 F, GLP) (ECHA)

D. Mobility in soil

- [PHENOXY EHTYL ISOBUTYRATE]: Koc 237.8 (Estimates)
- [ISOAMYL ACETATE]: Koc 130 (estimate) (HSDB)

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- It shall be treated by incineration
- Oil water separation technology shall be applied as pre-waste treatment if it is applicable
- Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them

B. Special precautions for disposal

- Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG CODE/IATA DGR)

- Not applicable

B. Proper shipping name

- Not applicable

C. Hazard Class

- Not applicable

D. IMDG CODE/IATA DGR Packing group

- Not applicable

E. Marine pollutant

- Not applicable

F. Special precautions for user related to transport or transportation measures

- Air transport(IATA): Not subject to IATA regulations.
- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE: Not available
- EmS SPILLAGE SCHEDULE: Not available

15. REGULATORY INFORMATION

A. National and/or international regulatory information

- o POPs Management Law
 - [DIPROPYLENE GLYCOL] : Not applicable
 - [METHYL ANTHRANILATE]: Not applicable
 - [PHENOXY EHTYL ISOBUTYRATE]: Not applicable
 - [PHENYL ETHYL ALCOHOL]: Not applicable
 - [ETHYL LINALOOL] : Not applicable
 - [ETHYL BUTYRATE]: Not applicable
 - [ISOAMYL ACETATE]: Not applicable
 - [ETHYL PROPIONATE]: Not applicable
 - [ETHYL CAPROATE]: Not applicable
 - [DAMASCENONE]: Not applicable
- o Information of EU Classification
 - * Classification
 - [ISOAMYL ACETATE] : H226 - [ETHYL PROPIONATE] : H225
- o U.S. Federal regulations
 - * OSHA PROCESS SAFETY (29CFR1910.119)
 - Not applicable
 - * CERCLA Section 103 (40CFR302.4)
 - [ISOAMYL ACETATE] : 2267.995 kg 5000 lb
 - * EPCRA Section 302 (40CFR355.30)
 - Not applicable
 - * EPCRA Section 304 (40CFR355.40)
 - Not applicable
 - * EPCRA Section 313 (40CFR372.65)
 - Not applicable
- $\circ \ \textbf{Rotterdam Convention listed ingredients}$
 - Not applicable
- o Stockholm Convention listed ingredients
 - Not applicable
- o Montreal Protocol listed ingredients
 - Not applicable

16. OTHER INFORMATION

A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2022-06-09

C. Revision number and Last date revised

- Not applicable

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).