

PHA® - HAP Classics

Safety Data Sheet

PHA® and HAP products are not classified as dangerous products according to European Union legislation, and they are used as flavourings for food, for example in the brewing of beer. However, this safety data sheet is provided voluntarily according (as appropriate) to the principles of the Classification, Labelling and Packaging Regulations (Regulation (EC) No. 1272/2008).

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product Identifier

PHA® Classics in PG and HAP Classics in PG

1.2 Synonyms

PHA® Classics and HAP Classics are aroma products that provide a defined aroma characteristic. This safety data sheet is suitable for all of the products listed below:

- HAP F&H Blends (code 126248)
- HAP F/H blend 40/60 (code 126234)
- HAP FGC (code 126231)
- HAP FL Extra Linalool (code 126255)
- HAP Floral PG (code 126221)
- HAP Herbal PG (code 126222)
- HAP LAB436 (code 126304)
- PHA® Super Floral PG (code 126704)
- PHA® 432A (code 126238)
- PHA® 443 (code 126239)
- PHA® 449 (code 126242)
- PHA® 476 (code 126356)
- PHA® 482 (code 126302)
- PHA® Balance (code 126626)
- PHA® Citra Classic (126277)
- PHA® Citrussy PG (code 126224)
- PHA® Esters PG (code 126225)
- PHA® Floral 420 (code 126303)
- PHA® Floral PG (code 126256)
- PHA® Herbal PG (code 126257)
- PHA® M (code 126227)
- PHA® Myrcene PG (code 126263)
- PHA® Pomegranate (126353)
- PHA® Rose (126602)
- PHA® Spicy PG (code 126223)
- PHA® Sylvan DP (code 126236)
- PHA® Sylvan PG (code 126226)
- PHA® Zero (various codes)
- PHA Soft Myrcene (code 126715)
- PHA Myrcene US (code 126283)
- PHA Super Citrussy (code 126284)

- PHA 3M (code 126362)
- PHA HITA (code 126363)

1.3 Relevant Uses To be used as a flavouring for foods and beverages. Not for direct consumption as an undiluted product

1.4 Supplier BarthHaas / BarthHaas UK

1.5 Emergency Contact Details BarthHaas / BarthHaas UK
Hop Pocket Lane, Paddock Wood, Kent, TN12 6DQ, UK
Emergency phone: +44 1892 833 415 (09:00 - 17:30 Mon-Thurs; 09:00 - 16:30 Fri, UK time)
Email: enquiries@barthhaas.co.uk

2. HAZARD IDENTIFICATION

2.1 Classification Not classified (Regulation (EC) No 1272/2008)
Not classified (Directive 67/548/EEC)

2.2 Label Elements N/A (not classified)

2.3 Other Hazards None

3. COMPONENTS/INFORMATION ON INGREDIENTS

Component	Concentration (% m/m)	CAS no.	EINECS no.	Hazard classification of the individual component
Propylene glycol (propan-1,2-diol)	45 - 99.99	57-55-6	200-338-0	Propylene glycol has a workplace exposure limit assigned. It is non hazardous when used as directed. Propylene glycol is registered as a food additive in the European Union as E 1520.



4. FIRST AID MEASURES

4.1 Description of First

Aid Methods:

- **Inhalation**
 - **Skin Contact**
 - **Eye Contact**
 - **Oral Ingestion**
- Move the exposed person to fresh air at once. Rinse nose and mouth with water. Other medical attention if discomfort continues.
 - Wash skin thoroughly with soap and water
 - Wash eye with plenty of water. Obtain medical attention if symptoms persist.
 - Rinse mouth thoroughly provided person is conscious. Obtain medical attention if discomfort continues.

4.2 Most important symptoms and Effects

No data available. See Section 11

4.3 Indications of Immediate Medical

No data available

5 FIRE AID MEASURES

5.1 Extinguishing Media

Carbon dioxide, water spray, dry powder and alcohol-resistant foam. Do not use full water jet.

5.2 Special Hazards Arising from Substance

Propylene glycol will give rise to toxic fumes in fire.

5.3 Advice for Firefighters

Firefighters should wear self-contained positive pressure breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Protection

Wear appropriate protective clothing – see Section 8.

6.2 Environmental Precautions

Do not discharge onto the ground or into watercourses

6.3 Methods for Cleaning Up

Contain spillage using earth, sand or other inert material.

Transfer to suitable sealed container prior to disposal.

Wash spillage site with water. Do not contaminate water sources or sewer.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling Avoid spilling, skin and eye contact.

7.2 Conditions for Safe Storage Keep container closed when not in use. Keep away from heat and from sources of ignition. Suitable storage is high-grade stainless steel, glass, aluminium or lacquered steel drums. Store at 0 - 20 °C (32 - 68 °F).

7.3 Specific End Uses The substance is manufactured from food ingredients and it is for use as a processing aid during the manufacture of foodstuffs. It is therefore not subject to registration via REACH (Regulation (EC) No. 1907/2006) for such uses. It should be used in accordance with applicable food legislation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters Components of the preparation for which there are workplace exposure limits:

- Propylene glycol: UK: long term exposure limit, measured as 8-hour time weighted average (TWA) (refs.1.3): 150 ppm (474 mg/m³) for total vapour and particulates; 10 mg/m³ for particulates.
- Propylene glycol is present at 45 - 99.99 % w/w (see Section 3)

8.2 Exposure Controls:

- **Engineering Controls** - Provide adequate ventilation. Observe the workplace exposure limits and minimize the risk of inhalation of vapours.
- **Eye/Face Protection** - If in danger of splashing, wear chemical goggles.
- **Hand Protection** - Suitable protective gloves if risk of skin contact.
- **Skin Protection** - If danger of splashing, wear PVC or rubber apron
- **Respiratory Protection** - Not normally required



9. PHYSICAL AND CHEMICAL PROPERTIES

a) Physical state	Liquid
b) Color	Clear, transparent to pale yellow
c) Odor	Characteristic (depending on specific PHA®/HAP product)
d) Melting point/Freezing point	Not practical to measure
e) Boiling point	No data available. Data for propylene glycol: >150 °C (302 °F)
f) Flammability	No data available. Data for propylene glycol: LEL 2.6%, UEL 12.5%
g) Lower and upper explosion limit	No data available. Data for propylene glycol: Heat or flame may cause explosions.
h) Flash point	>90 °C (194 °F)
i) Auto-ignition temperature	Not practical to measure
j) Decomposition temperature	No hazardous decomposition when used for its intended use.
k) pH	Not practical to measure
l) Kinematic viscosity	Not practical to measure
m) Solubility	Soluble
n) Partition coefficient n-octanol/water (log value)	Not practical to measure
o) Vapor pressure	No data available. Data for propylene glycol: <10 mbar at 20 °C

p) Density [kg/m³] 1.010 - 1.060

q) Relative vapor density Not practical to measure

r) Particle characteristics Not practical to measure



10. STABILITY AND REACTIVITY

10.1 Reactivity	No reactivity hazards known.
10.2 Chemical Stability	Stable if stored according to Section 7.2 and 10.5
10.3 Possibility of Hazardous Reaction	None known
10.4 Conditions to Avoid	Avoid excessive heat for prolonged periods of time.
10.5 Incompatible Materials	Strong oxidizing substances. Strong acids. Strong bases
10.6 Hazardous Decomposition Products	Fire creates carbon monoxide (CO) and carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity	<p>Not known. The Product contains propylene glycol at 45 - 99.99 % w/w as indicated in Section 3. Propylene glycol is registered as a food additive in the EU as E 1520.</p> <p>Toxicological data for propylene glycol: LD50 oral rat, mouse 22, 22 g kg⁻¹, respectively (1)</p> <p>Propylene glycol may cause local irritation of skin and mucuous membranes (1). Spray and vapour in the eyes may cause irritation and smarting (2).</p>
11.2 Skin Corrosion/Irritation	No data available
11.3 Serious Eye Damage/Irritation	No data available
11.4 Respiratory or Skin Sensitization	No data available
11.5 Germ Cell Mutagenicity	No data available
11.6 Carcinogenicity	No data available

11.7 Reproductive Toxicity No data available

11.8 STOT- Single Exposure No data available

11.9 STOT-Repeated Exposure No data available

11.10 Aspiration Hazard Not hazardous

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity No data available.
The product contains propylene glycol at 45 - 95.99 % w/w as indicated in Section 3. Propylene glycol is not regarded as dangerous for the environment (2). Data for propylene glycol: LC50 (24hr) goldfish >5000 mg l-1 (1); EC50 (24 and 48 hr) Daphnia magna > 10 g l-1 (1)

12.2 Persistence and Degradability No data available. Propylene glycol is biodegradable.

12.3 Bioaccumulative Potential No data available. The bioconcentration of propylene glycol has been estimated as <1 (1).

12.4 Mobility in Soil No data available. Miscible with water.

12.5 Results of PBT Exposure: No data available

12.6 Other Adverse Effects Exposure No data available



13. DISPOSAL CONSIDERATIONS

- 13.1 Product Disposal** Dispose in accordance with all applicable local and national regulations.
- 13.2 Container Disposal** Labels should not be removed from containers until they have been cleaned. Contaminated containers should not be treated as household waste. Containers should be cleaned using appropriate methods and then re-used or disposed of by landfill or incineration as appropriate.

14. TRANSPORT INFORMATION

- 14.1 UN-Number** Non-hazardous for transport
- 14.2 Class** Non-hazardous for transport
- 14.3 Shipping name** N/A
- 14.4 Packing Group** Non-hazardous for transport
- 14.5 Marine pollutant:** Not data available

15. REGULATORY INFORMATION

- 15.1 Safety, Health, and Environmental Regulations** Not classified (Regulation (EC) No. 1272/2008)
The substance is a food ingredient and its therefore not subject to registration via REACH (Regulation (EC) No. 1907/2006).
- 15.2 Chemical Safety Assessments** No data available

16. OTHER INFORMATION

The information in this safety data sheet is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on our present knowledge and should be used only as a supplement to information already in your possession concerning this product. It does not represent any guarantee of the properties of the product. The determination of whether and under what condition the product should be used is yours to make. We do not accept any liability for loss, injury or damage that may result from its use.

References: (1) Dictionary of Substances and their Effects (DOSE), 3rd Electronic Edition, 2005 (Royal Society of Chemistry/.Knovel Corp.) (2) Supplier SDS for propylene glycol. (3) EH40/2005 Workplace Exposure Limits, Health and Safety Executive, 2nd Edition 2011. General references for Pbackground: supplier SDS for grapefruit oil and for lactic acid.