



EUPHORICS™

General Description & Application Guidelines

PRODUCT DESCRIPTION

Euphorics™ is a line of highly concentrated flavor blends derived from hop oils and artfully selected botanical extracts. It is designed to achieve a flavor intensity and amplitude that goes beyond what is achievable with hops only. Euphorics comes as a water-based emulsion and it's 100% soluble in cold liquid. It is a versatile flavor solution and a creative tool for beer and other beverage applications.

Euphorics will be available in the following flavors at product launch, with more flavors to come:

COSMIC GUAVA: Flavors of ripe guava, fresh basil oil, cannabis, candy-like notes of bubblegum, and tangerine

PEACHY KEEN: Flavors of ripe peach, fleshy sweet fruits, some tropical notes like passionfruit, and a slight berry background

PINEAPPLE PARADISE: A complex blend of candied and fleshy pineapple, rounded out with passionfruit juice and undertones of citrus zest and stone fruit

POMELO DAYDREAM: A distinct pomelo and grapefruit flavor, complemented by a slight tropical sulfur, reminiscent of a fresh juice mix

DOSING AND USAGE

To maximize its flavor impact, Euphorics is designed to be added in late stages of the process, ideally after a clarification step. It is compatible with beer, cider, kombucha, nonalcoholic beer, hop waters, amongst other beverages, and can be used in combination with other hop products. For initial experimentation, HAAS recommends the following dose rates, dependent on the beverage matrices.

Euphorics can be dosed directly into the final beverage vessel, prior to packaging. Depending on the brewery configuration, this can be achieved by dosing it directly into the liquid through a port at the top of the tank, by dispersing Euphorics in beer in an external vessel, before sending the mix into the main tank, or by using an automated dosing skid.

| Matrix | Dose Rate Range (% v/v) |
|--------------------------|-------------------------|
| Beer, NA Beer & Kombucha | 0.003 – 0.010 |
| Waters & Teas | 0.001 – 0.006 |
| Hard Seltzers, FMB & RTD | 0.001 – 0.010 |

SPECIFICATIONS

Appearance: Opaque, white to pale yellow liquid

Sensory: True to flavor

Product type: Oil in water emulsion

Acids: Free of alpha, iso alpha or beta acids

Packaging sizes: 5 mL (samples), 50 mL, 500 mL and 1 L; other sizes available upon request.

STORAGE AND BEST-BY RECOMMENDATIONS

Euphorics is best stored under refrigerated conditions (35–46° F / 2–8° C). Freezing must be avoided to preserve the stability of the emulsion. Unopened and refrigerated bottles have a twelve (12) month shelf life. Opened containers should ideally be flushed with nitrogen before storage and used within the next two weeks.

Every batch of Euphorics is tested for pathogen and spoilage microorganisms.