

## DMDM Hydantoin

### Specification Sheet

**Description:** Organic compound belonging to a class of compounds known as hydantoins. Very effective broad-spectrum preservative. Clear liquid. pH (as is): 6.5-7.5. Active content 55.0 - 58.0%. Easily soluble in water.

**CAS:** 6440-58-0

**INCI Name:** DMDM hydantoin

**Benefits:**

- Effective broad-spectrum preservation against gram-positive and gram-negative bacteria, yeast, and mold
- For its good water solubility, it is particularly suggested for aqueous formulations and emulsions
- Extends shelf life of personal care products typically to 6-18 months
- Compatible with most cosmetic ingredients
- Product is non-irritating and non-sensitizing
- Environmentally friendly as it will not build up in aquatic organisms and will be broken down by microorganisms in soil.

**Use:** Recommended use level of 0.1-0.6% (approved for use up to 1% in USA and up to 0.6% in Europe). Performs well at pH levels up to 10 (ideal pH 4-10). Can be added directly to the formulation during pre- or post-emulsification at or below 60°C/140°F. For external use only.

**Applications:** All kinds of skin & hair care products, wipes, sun care products, & makeup products.

**Country of Origin:** USA

**Raw material source:** Formaldehyde, dimethylhydantoin

**Manufacture:** DMDM hydantoin is produced by reacting formaldehyde with dimethylhydantoin at 84 deg C. DMDM hydantoin can release formaldehyde.

**Animal Testing:** Not animal tested

**GMO:** GMO-free (does not contain plant-derived components)

**Vegan:** Does not contain animal-derived components