

NOVEMBER 2014

GreenScreen® for Safer Chemicals v 1.2

GreenScreen Benchmarks™



ABBREVIATIONS

- P** Persistence
- B** Bioaccumulation
- T** Human Toxicity and Ecotoxicity

GS BENCHMARK 4

Low P* + Low B + Low T (Ecotoxicity, Group I, II and II* Human) + Low Physical Hazards (Flammability and Reactivity) + Low (additional ecotoxicity endpoints when available)



Prefer—Safer Chemical

GS BENCHMARK 3

- a. Moderate P or Moderate B
- b. Moderate Ecotoxicity
- c. Moderate T (Group II or II* Human)
- d. Moderate Flammability or Moderate Reactivity



Use but Still Opportunity for Improvement

GS BENCHMARK 2

- a. Moderate P + Moderate B + Moderate T (Ecotoxicity or Group I, II, or II* Human)
- b. High P + High B
- c. High P + Moderate T (Ecotoxicity or Group I, II, or II* Human)
- d. High B + Moderate T (Ecotoxicity or Group I, II, or II* Human)
- e. Moderate T (Group I Human)
- f. Very High T (Ecotoxicity or Group II Human) or High T (Group II* Human)
- g. High Flammability or High Reactivity



Use but Search for Safer Substitutes

GS BENCHMARK 1

- a. PBT = High P + High B + [very High T (Ecotoxicity or Group II Human) or High T (Group I or II* Human)]
- b. vPvB = very High P + very High B
- c. vPT = very High P + [very High T (Ecotoxicity or Group II Human) or High T (Group I or II* Human)]
- d. vBT = very High B + [very High T (Ecotoxicity or Group II Human) or High T (Group I or II* Human)]
- e. High T (Group I Human)



Avoid—Chemical of High Concern

GS BENCHMARK U

Unspecified Due to Insufficient Data

See Guidance (GreenScreen for Safer Chemicals Hazard Assessment Procedure) at www.greenscreenchemicals.org for instructions.

Group I Human includes Carcinogenicity, Mutagenicity/Genotoxicity, Reproductive Toxicity, Developmental Toxicity (incl. Developmental Neurotoxicity), and Endocrine Activity. **Group II Human** includes Acute Mammalian Toxicity, Systemic Toxicity/Organ Effects-Single Exposure, Neurotoxicity-Single Exposure, Eye Irritation and Skin Irritation. **Group II* Human** includes Systemic Toxicity/Organ Effects-Repeated Exposure, Neurotoxicity-Repeated Exposure, Respiratory Sensitization, and Skin Sensitization. Immune System Effects are included in Systemic Toxicity/Organ Effects. **Ecotoxicity** includes Acute Aquatic Toxicity and Chronic Aquatic Toxicity.

* For inorganic chemicals persistence alone will not be deemed problematic. See Guidance.