

Product Risk Assessment



Global Green Chemical Public Company Limited

Date June 2023

Product Risk Assessment

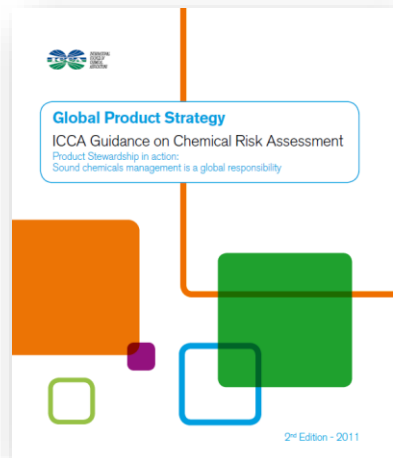
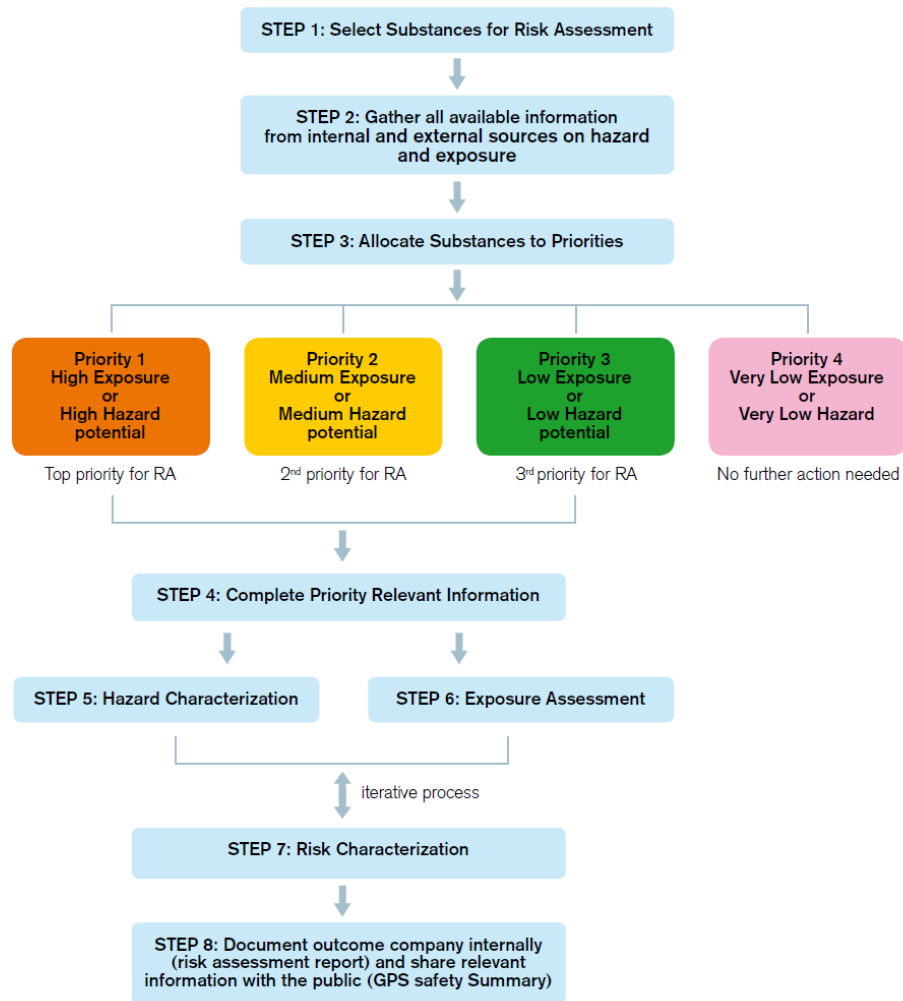


Figure 1: The GPS Risk Assessment Process



b) Environment (based on GHS classification criteria)

Hazard Endpoint	Decision Yes	Decision Yes	Decision No	Decision No
Hazardous level	Level 1	Level 2	Level 3	Level 4
Acute toxicity	UN GHS Cat 1 For substances and tested mixtures: L(E)C50 ≤ 1mg/L where L(E)C50 is either fish 96hr LC50, crustacea 48hr EC LC50 or aquatic plant 72 or 96hr ErC50	UN GHS Cat 2 For substances and tested mixtures: 1mg/L < L(E)C50 ≤ 10mg/L where L(E)C50 is either fish 96hr LC50, crustacea 48hr EC LC50 or aquatic plant 72 or 96hr ErC50	UN GHS Cat 3 For Substances and tested mixtures: 10mg/L < L(E)C50 ≤ 100mg/L where L(E)C50 is either fish 96hr LC50, crustacea 48hr EC LC50 or aquatic plant 72 or 96hr ErC50	No classification No acute toxicity
Chronic toxicity	UN GHS Cat 1 For substances: • L(E)C50 ≤ 1mg/L; and • Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF ≥ 500 or if absent log Kow ≥ 4) where L(E)C50 is either fish 96hr LC50, crustacea 48hr EC LC50 or aquatic plant 72 or 96hr ErC50	UN GHS Cat 2 For substances: • 1 mg/L < L(E)C50 ≤ 10 mg/L; and • Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF ≥ 500 or if absent log Kow ≥ 4); unless • Chronic NOECs > 1mg/L	UN GHS Cat 3 For substances: • 10 mg/L < L(E)C50 ≤ 100 mg/L; and • Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF ≥ 500 or if absent log Kow ≥ 4); unless • Chronic NOECs > 1mg/L	UN GHS Cat 4 For substances: • Poorly soluble and no acute toxicity is observed up the water solubility • Lack the potential to rapidly biodegrade and have the potential to bioaccumulate (BCF ≥ 500 or if absent log Kow ≥ 4); unless • Chronic NOECs > 1mg/L
Persistence	T1/2 marine, fresh water > 60 d T1/2 marine, fresh sediment > 180 d	T1/2 marine water > 60 days, or fresh water > 40 d T1/2 marine sediment > 180 d, T1/2 soil > 120 d	Not applicable	Not PBT
Bioaccumulation	BCF > 5000 L/kg	BCF > 2000 L/kg	Not applicable	Not PBT

Thank you