The Globally Harmonized System for the Classification and Labelling of Chemicals
(The GHS)

Implementation of the GHS in Canada

Workplace Hazardous Materials Information System (WHMIS)

TABLE 2 Classification Criteria for Mixtures

Hazard Categories	GHS Criteria	WHMIS Criteria
Flammable Gases	It is assumed that all products will be tested.	It is assumed that all products will be tested.
Flammable Aerosols		
Oxidizing Gases		
Gases Under Pressure		
Flammable Liquids		
Flammable Solids		
Self-Reactive Substances		
Pyrophoric Liquids		
Pyrophoric Solids		
Self-Heating Substances		
Substances which in contact with water emit flammable gases		
Oxidizing Liquids		
Oxidizing Solids		
Organic Peroxides		
Corrosive to Metals		

Classification Criteria for Mixtures

Hazard Classes	GHS Criteria	WHMIS Criteria
Acute Toxicity - Oral		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all ingredients in the mixture	Use formula	Use formula
4. Test data available for some ingredients, ≤10% ingredients with unknown toxicity	Use formula in 3.	Use professional judgement
5. Test data available for some ingredients, >10% ingredients with unknown toxicity	Use modified formula in 3.	Use professional judgement
Acute Toxicity - Skin		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all ingredients in the mixture	Use formula	Use formula
4. Test data available for some ingredients, ≤10% ingredients with unknown toxicity	Use formula in 3.	Use professional judgement
5. Test data available for some ingredients, >10% ingredients with unknown toxicity	Use modified formula in 3.	Use professional judgement
Acute Toxicity - Inhalation		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all ingredients in the mixture	Use formula	Use formula
4. Test data available for some ingredients, ≤10% ingredients with unknown toxicity	Use formula in 3.	Use professional judgement
5. Test data available for some ingredients, >10% ingredients with unknown toxicity	Use modified formula in 3.	Use professional judgement

Skin Corrosion		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Use additivity formula or classify based on irritating ingredients present in concentration of 1% or more	Classify if mixture contains an ingredient, classified as dermal corrosive, in a concentration of 1% or more.
Skin Irritation		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Use additivity formula or classify based on irritating ingredients present in concentration of 3% or more	Classify if mixture contains an ingredient, classified as dermal irritant, in a concentration of 1% or more.
Serious Eye Damage		
1. Test data on mixture	Use test data.	
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Use additivity formula or classify based on irritating ingredients present in concentration of 1% or more.	Classify if mixture contains an ingredient, classified as an causing serious damage to eyes, in a concentration of 1% or more.
Eye Irritation		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Use additivity formula or classify based on irritating ingredients present in concentration of 1% or more	Classify if mixture contains an ingredient, classified as an eye irritant, in a concentration of 1% or more.
Respiratory Sensitization		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify if mixture contains an ingredient, classified as an respiratory sensitizer, is present in a concentration of 0.1% or more (regardless of physical state)	Classify if mixture contains an ingredient, classified as an respiratory sensitizer, in a concentration of 0.1% or more.
Skin Sensitization		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify if mixture contains an ingredient, classified as a skin sensitizer, is present in a concentration of 0.1% or more (regardless of physical state)	Classify if mixture contains an ingredient, classified as an respiratory sensitizer, in a concentration of 0.1% or more

Mutagenicity		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify based on mutagenic ingredients present in concentration of 0.1% or more for Category 1 or 1.0% or more for Category 2.	Classify based on mutagenic ingredients present in concentration of 0.1% or more for D2A or 1.0 % or more for D2B.
Carcinogenicity		
1. Test data on mixture	Use test data.	Classify based on carcinogenic ingredients present in concentration of 0.1% or more, or use test data on a case by case basis.
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify based on carcinogenic ingredients present in concentration of 0.1% or more.	Classify based on carcinogenic ingredients present in concentration of 0.1% or more.
Reproductive Toxicity		
1. Test data on mixture	Use test data.	Classify based on ingredients which are toxic to reproduction. Present in concentration of 0.1% or more, or use test data on a case by case basis.
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify based on ingredients which are toxic to reproduction, present in concentration of 0.1% or more.	Classify based on ingredients which are toxic to reproduction. Present in concentration of 0.1% or more.
Target Organ Systemic Toxicity - Single Exposure		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify based on ingredients which are classified as target organ systemic toxicants by repeated exposure, present in concentration of 1.0% or more.	Classify based on ingredients which are classified as target organ systemic toxicants by repeated exposure, present in concentration of 1.0% or more.
Target Organ Toxicity - Repeat Exposure		
1. Test data on mixture	Use test data.	Use test data
2. Test data available on similar mixtures	Use Bridging Principles	Use professional judgement
3. Test data available for all or some ingredients in the mixture	Classify based on ingredients which are classified as target organ systemic toxicants by repeated exposure, present in concentration of 1.0% or more.	Classify based on ingredients which are classified as target organ systemic toxicants by repeated exposure, present in concentration of 1.0% or more.