

Table 1

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
Acute Human Effects			9	9	8	
	Inhalation Toxicity		4			
		LC50 ppm				
		Vapor GHS Category Level	4			
		mg/l gas/vapor				
		mg/l dust/mist/fume				
		Key Phrases				
		Solid GHS Category Level				
		GHS H Phrases				
	Oral Toxicity		8	8	8	
		LD50 mg/kg	8	4	8	
		Key Phrases				
		GHS H Phrases		8	6	
		GHS Category Level	4	6	4	
	Dermal Toxicity					
		LD50 mg/kg				
		Key Phrases				
		GHS H Phrases				
		GHS Category Level				
	Respiratory Irritation				4	
		Key Phrases				
		GHS H Phrases			4	
		GHS Category Level				
	Dermal Irritation		8	10	8	
		Key Phrases				
		GHS Category Level	8	10	6	
		GHS H Phrases		6	8	
	Eye Irritation		10		8	
		Key Phrases				
		GHS H Phrases			8	
		GHS Category Level	10		8	
	Exposure Limits		6			
		PEL/TLV ppm	6			
		PEL/TLV (dusts/particles) mg/m3	2			
		GHS Category Level				
	IDLH					
		ppm				
	Health					

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
		NFPA/HMIS 0,1,2,3,4				
Chronic Human Effects						
	Carcinogen					
		IARC Category				
		EPA CLASS Category				
		ACGIH Category				
		OSHA Category				
		Key Phrases				
		GHS H Phrases				
		GHS Category				
		Prop 65 Category				
	Mutagen/Teratogen					
		Key Phrases				
		GHS H Phrase				
		GHS Category				
	Reproductive/Developmental					
		Key Phrases				
		GHS H Phrases				
		GHS Category				
		Prop 65 Category				
	Neurotoxicity					
		GHS Category - STOT - Single Exposure				
		GHS Category - STOT - Repeated Exposure				
		Key Phrases				
		GHS H Phrase				
	Respiratory Sensitivity/Disease					
		Asthmagen Type (AOEC Database)				
		Key Phrases				
		GHS H Phrase				
		GHS Category				
	Endocrine System Effects					
		EU - Priority Endocrine Disruptor				
		EU - SVHC				
		ChemSec - SIN				
		OSPAR				
		TEDX				
		Key Phrases				
	Other Chronic Organ Effects					
		Key Phrases				
		GHS H-Phrase - Single Exposure				
		GHS Category - STOT -Single Exposure				

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
		GHS H-Phrase - Repeated Exposure				
		GHS Category - STOT - Repeated Exposure				
Ecological Hazards			10			
	Acute Aquatic Toxicity		10			
		Acute Fish LC50 (mg/l)				
		Acute Algae (or other aquatic plant) EC50 (mg/l)				
		Key Phrases	10			
		GHS H Phrases				
		GHS Category level	10			
	Chronic Aquatic Toxicity (fish, crustacea or algae) - Rapidly Degradable, with Adequate Data					
		NOEC (NOAEC) or ECx (mg/l)				
		mg/l				
		Key Phrases				
		GHS H Phrases				
		GHS Category				
	Chronic Aquatic Toxicity (fish, crustacea or algae) - NOT Rapidly Degradable, with Adequate Data					
		mg/l				
		Key Phrases				
		GHS Category level				
Environmental Fate & Transport						
	Persistence					
		Water t1/2 Days				
		Water Signal Words				
		Air t1/2 Days				
		Air Signal Words				
		Soil/Sediment t1/2 Days				
		Soil/Sediment Signal Words				
		Key Phrases				
	Rapid Degradability					
		28-day Studies:%Breakdown Based on Dissolved Organic Carbon				
		28-day Studies: % Based on O2 Depletion or CO2 Generation				
		BOD Half-life (days)				
		Hydrolysis Half-life (days)				
		Key Phrases				
	Bioconcentration/ Bioaccumulation					
		Log Kow / Pow				
		BAF/BCF (l/kg)				
		Presence on Env Canada CEPA Domestic Substances List (DSL)				
		Key Phrases				
Atmospheric Hazard						

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
	Greenhouse Gas					
		GWP Relative to CO2				
		Y/N				
	Ozone Depletor					
		ODP Units				
		GHS H Phrase				
		Ozone Classification				
	Acid Rain Formation					
		Y/N				
		Key Phrases				
	NESHAP					
		Y/N				
		Key Phrases				
Physical Properties			10	10		
	Vapor Pressure					
		mm Hg				
	Flammability: Liquid					
		NFPA/HMIS 0,1,2,3,4				
		GHS H Phrase				
		GHS Category level				
	Flash point: Liquid					
		deg C				
		Key Phrases				
	Flammability: Gas					
		GHS H Phrase				
		GHS Category Level				
	Reactivity					
		NFPA/HMIS 0,1,2,3,4				
		GHS H Phrase				
		GHS Category Level				
	pH		10			
		pH Units	10			
		Key Phrases				
	Corrosivity			10		
		Key Phrases				
		GHS Category Level		10		
	Odor					
		Key Phrases				
	Volatile Organic Compound					
		g/l				
Process Factors						

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
	Heat					
		WBGT, deg C				
	Noise Generation					
		dba/hr				
	Vibration					
		Class 1 Small Machine (mm/s)				
		Class 2 Medium Machine (mm/s)				
		Class 3 Large Rigid Foundation (mm/s)				
		Class 4 Large Soft Foundation (mm/s)				
	Ergonomic Hazard					
		Occurence				
		Hazard Level				
	Psychosocial Hazard					
		Work Overload and Pace: Work Load				
		Work Overload and Pace: Machine Pacing				
		Work Overload and Pace: Time Constraints				
		Work Schedule: Shift Work				
		Work Schedule: Work Isolation				
		Control				
		Work Environment & Equipment: Equipment Stability				
		Work Environment & Equipment: Work Space				
	High Pressure System					
		Pressure (Delta % Change From Ambient)				
	High temperature System					
		Temperature (Delta % Change From Ambient)				
	Water Use					
		% Water Change				
		Reuse				
	Energy Use					
		% Energy Change				
		% Renewable Energy				
	Exposure Potential					
		Occurence: Near Certain				
		Occurence: Highly Likely				
		Occurence: Likely				
		Occurence: Unlikely				
		Occurence: Remote				
Life Cycle Factors						
	Upstream Effects					
		Key Phrases				
	Consumer Hazard					

Category	Sub Category	Data	Ammonium Hydroxide	Ammonium Thioglycolate	Cysteamine	
		Key Phrases				
	Disposal Hazard (landfill, incineration)					
		Key Phrases				
	Reportable Quantity					
		Pounds				
	Recycling					
		% Recyclable at End of Life				
		Uses Products With % Recycled Material				
	Renewable to Nonrenewable Resource					
		% Renewable Materials				
		Key Words				
		Final Score	29	19	8	
		Weighted Average	9.7	9.5	8	