1. Identification

1.1 Product Identifier: YellowGo

1.2 Recommended Use of the Chemical and Restrictions on Use: Textile dye remover for industrial/institutional use only. Do not use at home. Keep out of reach of children.

1.3 Details of the Supplier of the Safety Data Sheet:

A. L. Wilson Chemical Co., PO Box 207, Kearny, NJ 07032, USA

Telephone: 201-997-3300 E-mail: SDS@ALWilson.com

1.4 Emergency Telephone Number:

Chemtrec: 800-424-9300 or 703-527-3887

2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Acute Toxicity - Category 3.

Skin and Eye Corrosion/Irritation - Category 1.

2.2 Label Elements:

Contains: 15-20% Titanyl Sulfate [13825-74-4], 20-30% Sulfuric Acid [7664-93-9], 1-10% Ammonium Bifluoride [1341-49-7], Citric Acid [77-92-6], Water [7732-18-5].

Hazard Pictograms:

Signal Word: Danger

Hazard Statements:

H301: Toxic if swallowed.

H314: Causes severe skin burns and eye damage.

Precautionary Statements:

Prevention:

P102: Keep out of reach of children.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P308+P313: If exposed or concerned: Get medical advice/attention.

P301+P310+P330+P331+P321: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

P303+P361+P353+P363: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P234: Keep only in original container.

P405: Store locked up.

Disposal Considerations:

P501: Dispose of contents/container to hazardous or special waste collection point and in accordance to applicable regulations.

2.3 Other Hazards:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. See section 8 for exposure limits.

3. Composition/Information on Ingredients

Name	CAS No.	Concentration
Water	7732-18-5	30% ≤ C ≤ 70%
Sulfuric Acid	7664-93-9	20% ≤ C ≤ 30%
Titanyl Sulfate	13825-74-4	15% ≤ C ≤ 20%
Ammonium Bifluoride	1341-49-7	1% ≤ C ≤ 10%
Citric Acid	77-92-6	1% ≤ C ≤ 10%

4. First Aid Measures

4.1 Description of Necessary First Aid Measures:

General Information: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, both Acute and Delayed:

Eye Contact: Causes severe eye damage. Skin Contact: Causes severe skin burns.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: See section 4.1.

5. Fire-fighting Measures

5.1 Suitable Extinguishing Media:

Suitable Extinguishing Media: Dry chemical.

Unsuitable Extinguishing Media: For safety reasons, do not use high pressure water jet or water stream.

- **5.2 Specific Hazards Arising from the Substance or Mixture:** Hydrogen gas may be generated when acid comes in contact with metal.
- **5.3 Special Protective Action for Fire-fighters:** Use appropriate Personal Protective Equipment when fighting chemical fires. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Additional Information: Use water spray to cool nearby containers exposed to fire.

6. Accidental Release Measures

- **6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Cordon off spill area. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
- **6.2 Environmental Precautions:** Avoid release to the environment. Dispose of contents/container to waste collection point and in accordance to applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up: Neutralize spills with soda ash or lime slurry. Never neutralize with a strong alkali material. Collect slurry waste and dispose to hazardous or special waste collection point and in accordance to applicable regulations.

7. Handling and Storage

7.1 Precautions for Safe Handling: Keep out of reach of children. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

7.2 Conditions for Safe Storage, Including any Incompatibles:

Storage Class: Acids

Store in original container only. Safely lock container in a cool and well ventilated place. Keep container sealed when not in use.

Packaging Material: Plastic. Do not reuse.

Unsuitable Packaging Material: Any glass or metal container.

8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Exposure Limits Values

Name	Air Concentration USA ACGIH TLV (ppm)	Air Concentration USA OSHA TWA (mg/m³)
Sulfuric Acid	Data Not Available	1.0
Ammonium Bifluoride as Flourides "F"	Data Not Available	2.5

8.2 Exposure Controls:

Engineering Measures: Work in a well ventilated area or under a ventilation hood.

8.3 Individual Protection Measures, such as Personal Protective Equipment:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Eye Protection: Wear closed safety glasses or chemical splash goggles.

Skin Protection: Wear protective clothing.

Respiratory Protection: Above OELV of F and/or Sulfuric Acid wear approved mask for F or Sulfuric Acid.

Hand Protection: Wear protective gloves. Gloves must be inspected prior to use. Replace if worn or damaged.

Do not reuse.

Hygiene Measures: Wash thoroughly after handling. Do not smoke, eat or drink in work area.

9. Physical and Chemical Properties

Appearance: Violet to Black Liquid.

Odor: Pungent Odor.

Odor Threshold: Not Determined.

pH: ≤ 1.0

Melting Point/Freezing Point (°C): Not Determined.

Initial Boiling Point/Boiling Point Range (°C): Not Determined.

Flash Point (°C): Not Applicable. Evaporation Rate: Not Applicable

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Flammability (solid, gas): Not Applicable.

Upper/Lower Flammability or Explosive Limits: Not Applicable.

Vapor Pressure: Not Determined. Vapor Density: Not Determined.

Relative Density (Water = 1): 1.45 at 20 ℃.

Solubility: Soluble in Water.

Partition Coefficient: n-Octanol/Water: Not Applicable.

Auto-ignition Temperature: Not Applicable.

Viscosity: Not Determined.

Explosive Properties: Not Applicable.

Oxidizing Properties: Not Applicable.

10. Stability and Reactivity

10.1 Reactivity: Reaction with metals can potentially release dangerous hydrogen gas.

10.2 Chemical Stability: Stable if used according to specifications.

10.3 Possibility of Hazardous Reactions: Not determined.

10.4 Conditions to Avoid: Avoid contact with strong alkalis, oxidizing compounds, metals.

10.5 Incompatible Materials: Strong alkalis and oxidizing compounds.

10.6 Hazardous Decomposition Products: In case of fire: Decomposition emits highly corrosive fluoride fumes.

11. Toxicological Information

Acute Toxicity: Data not available for mixture.

Toxicological Information o	n Ingredients:		Acute Toxicity	
Name	CAS No.	Oral LD50 (Rat - mg/Kg)	Inhalation LC50 (Rat – ppm)	Dermal LD50 (Rabbit – mg/Kg)
Sulfuric Acid Solution	7664-93-9	155	4 hours – 255	Extremely corrosive and destructive to tissue
Ammonium Bifluoride*	1341-49-7	32	-	-
*LD ₅₀ (Intraperitoneal -Rat)				

Skin Corrosion/Irritation: Causes severe skin burns.

Serious Eye Damage/Eye Irritation: Causes severe eye damage.

Respiratory or Skin Sensitization: No information available.

Germ Cell Mutagenicity: No information available.

Carcinogenicity: Do not mist product, as strong inorganic acid mist containing Sulfuric Acid is listed by IARC,

NTP as a Group 1 carcinogenic to humans (IARC-1).

Reproductive Toxicity: No information available.

Specific Target Organ Toxicity – Single Exposure: No information available.

Specific Target Organ Toxicity - Repeated Exposure: No information available.

Aspiration Hazard: No information available.

Inhalation: Inhalation of vapors may cause damage to lungs, respiratory system and pulmonary edema.

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Subchronic/Chronic Toxicity: No information available.

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity: Harmful to aquatic life with long lasting effects.

Ingredient: Sulfuric Acid: LC50 - Gambusia affinis (Mosquito fish) - 42 mg/l - 96 h.

- **12.2 Persistence and Degradability:** Not applicable to inorganic substances or materials. The organic substance in this product is biodegradable.
- 12.3 Bioaccumulative Potential: There is no evidence to suggest bioaccumulation will occur.
- 12.4 Mobility in Soil: Not determined.
- **12.5 Results of PBT and vPvB Assessment:** This product does not contain PBT or vPvB substances.
- 12.6 Other Adverse Effects: No Data Available.

13. Disposal Considerations

13.1 Disposal Methods:

Product (Any Residual Waste/Unused Product): Dispose of any residual product waste or unused product to hazardous or special waste collection point and in accordance to applicable regulations. Avoid release to the environment.

Packaging (Yellow Plastic): After use, close empty bottle, and dispose of to hazardous or special waste collection point and in accordance to applicable regulations.

14. Transport Information

14.1 UN-Number: UN2922

14.2 UN Proper Shipping Name: Corrosive Liquids, Toxic, N.O.S. (contains Titanium Sulfate Solution / Ammonium Hydrogen Difluoride Solution)

14.3 Transport hazard class(es): 8 (6.1)

14.4 Packing group: PG II

14.5 Environmental Hazard(s): Marine Pollutant: No

14.6 Special Precaution to User: See section 7.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

15.1 Safety Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Regulations:

Inventory Status: All components are on TSCA.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

SARA (311/312) HAZARD CATEGORIES: Acute/Chronic.

SARA 313: This product contains the following SARA 313 Toxic Release Chemicals.

Chemical Name	CAS Number	Concentration	
Sulfuric Acid	7664-93-9	20% ≤ C ≤ 30%	
Ammonium Bifluoride	1341-49-7	1% ≤ C ≤ 10%	

16. Further Information

Abbreviations and Acronyms:

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ACGIH = American Conference of Governmental Industrial Hygienists.

C = Concentration (weight percent).

DOT = Department of Transportation (United States).

IMDG = International Maritime Dangerous Goods Code.

IARC = International Agency for Research on Cancer.

OSHA = Occupational Safety & Health Administration.

PBT = Persistent, Bioaccumulative and Toxic Substances.

ppm = parts per million.

OELV = Occupational Exposure Limits Values.

TLV = Threshold Limit Values.

TSCA = Toxic Substance Control Act.

TWA = Time-Weighted Average.

vPvB = very Persistent and very Bioaccumulative Substances.

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