



1 Material and Supplier Identification

Product Name: 401 Bio-Based Concentrated Restroom

Description: DFE Concentrated General Purpose Restroom Cleaner

Recommended use of the chemical and restrictions: Use only for the purpose on product label. This product is not intended to be used without prior dilution if specified on product label.

Supplier's Information: Maintex
13300 E. Nelson Ave
City of Industry, CA 91746
800-446-1888 (Customer Service)

Emergency Telephone: (800) 255-3924 USA (813)248-0585 International (Chemtel 24 hrs)

2 Hazards Identification

Classification of Mixture: Eye Irritation: Category 2B
Skin Irritation: Category 3

Pictogram
No Pictogram

Signal Word: WARNING

Hazard Statements: Causes mild skin irritation. Causes eye irritation

Precautionary Statements

General: KEEP OUT OF REACH OF CHILDREN. Read label before use.

Prevention: Wash hands thoroughly after handling.

Response: IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin with water. If skin irritation persists: Get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes.Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If problem persists, call a Poison Center or get medical attention.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

3 Composition/Information on Ingredients

Hazardous Ingredients	CAS Number	Concentration Range %
Citric Acid	77-92-9	20-30
Lauramine Oxide	1643-20-5	1-5

4 First Aid Measures

Eye Contact:	Flush eyes with water for 15 minutes. Remove contact lenses if any.
Skin Contact:	Contact with concentrate may be an irritant to sensitive skin. If spilt in large areas of skin, rinse immediately with water and remove clothing. Wash skin thoroughly with soap and water.
Inhalation	If discomfort is experienced after prolonged exposure to vapours, move person to fresh air. Get medical attention if irritation persists.
Ingestion:	Get medical attention immediately. Rinse mouth with water. Do NOT induce vomiting. Drink glass of water to dilute product.

5 Firefighting Measures

Suitable Extinguishing Media:	Water spray, normal foam, dry agent (carbon dioxide, dry chemical powder.)
Specific Hazards arising from the Chemical:	In a fire or if heated, a pressure increase will occur and the container may burst. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide, and carbon dioxide.
Specific Protective Equipment and Precautions for Firefighters:	Firefighters should wear NIOSH approved self-contained breathing apparatus and protective clothing. If safe to do so, remove containers from path of fire. If involved in a fire, keep containers cool with water spray.

6 Accidental Release Measures

Emergency Procedures:	Keep area clear of personnel until area has been properly cleaned.
Personal Precautions/ Protective Equipment:	Slippery when spilt. To avoid accidents, clean up immediately and shut off source of leak, if safe to do so. Wear appropriate protective equipment to prevent any contamination of skin, eyes, and personal clothing. Provide sufficient ventilation.
Environmental Precautions:	If contamination of sewers or waterways has occurred, advise local emergency services.
Methods for Containment and Cleaning Up:	Contain spill with absorbent (soil, sand, or other inert material) or spill kit to prevent contamination of sewers or waterways. Neutralization agent is not recommended within building, as toxic vapors may be omitted. Properly dispose of used absorbents in accordance with local, state, and federal regulations.

7 Handling and Storage

Precautions for Safe Handling:	Avoid skin and eye contact, inhalation and ingestion. Wash hands thoroughly after use. Keep out of reach of children.
Conditions for Safe Storage, Including an Incompatibilities:	Store in cool, dry place and out of direct sunlight. Store away from source of heat or ignition. Do not mix with other chemicals. Keep container closed when not in use, and check regularly for leaks. See Section 10 for incompatible materials.

8 Exposure Controls/Personal Protection

Control Parameters:

Hazardous Ingredients

	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
Citric Acid	N/A	N/A	N/A
Lauramine Oxide	N/A	N/A	N/A

Appropriate engineering controls:

Good ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protection

Eye Protection: Use protective glasses or safety goggles if splashing or spray-back is likely.

Hand Protection: Use protective gloves when used for prolong periods or if skin sensitive.

Skin Protection: Use apron if splashing or spray-back is likely.

Respiratory Protection: Use in well ventilated areas or local exhaust ventilation when cleaning small spaces.

Hygiene Measures: Always wash hands after handling chemical products, and before smoking, eating, drinking, or using the toilet. Wash contaminated clothing or protective equipment before storage and re-use.

9 Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.02	Vapour Pressure (mm Hg):	< 17 mm Hg
Color:	Green	Evaporation Rate:	< 1	Vapour Density:	> 1
Odor:	Neutral	Solubility in Water:	Complete	Freezing Point (°F):	< 32
pH:	1.5-2.5	VOC (g/L):	N/A	Boiling Point (°F):	> 212
				Flash Point (°F):	> 200

< means less than

> means greater than

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10 Stability and Reactivity

Reactivity: No specific data

Chemical Stability: Stable

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid exposure to heat and light.

Incompatible Materials: Slightly reactive or incompatible with oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological Information

Symptoms:

Eye Contact:	Adverse symptoms may include the following: irritation, watering, redness
Skin Contact:	Adverse symptoms may include the following: irritation, redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing
Ingestion:	Adverse symptoms may include the following: stomach pains

Acute Toxicity:

Eye Contact:	Causes serious eye damage.
Skin Contact:	May cause skin irritation.
Inhalation:	May cause respiratory irritation.
Ingestion:	May cause burns to mouth, throat and stomach.

Toxicity Data:

Hazardous Ingredients

	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Citric Acid	LD50 Oral	Rat	5400 mg/kg
Lauramine Oxide	LD50 - Dermal	Rabbit	>2000 mg/kg
	LD 50- Oral	Rat	>1065 mg/kg

Chronic Effects: No known significant effects or critical hazards

12 Ecological Information

Ecotoxicity: No data available.

Aquatic Toxicity:

Hazardous Ingredients

	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Citric Acid	LC50	Fish	440 mg/l
	EC50	Daphnia	1534 mg/l
Lauramine Oxide	EC 50	Algae	0.19 mg/l 72 hrs
	EC 50	Daphnia	3.1 mg/l 48 hrs
	LC 50	Fish	2.67 mg/l 96 hrs

Other Adverse Effects: No known significant effects or critical hazards.

13 Disposal Considerations

Disposal Methods: Diluted product can be flushed to sanitary sewer. Discard empty container in trash. Dispose of waste in accordance with federal, state, and local regulations.

14 Transportation Information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Ground Transport

DOT Classification:

UN Number:

Transport Hazard Class:

Packaging Group:

Hazardous Division:

Hazardous Contents:

15 Regulatory Information

SARA Title III: No

California Proposition 65: No

Other Regulations:

16 Other Information

HMIS/NFPA Hazard Rating:

Health: 1

Flammability: 0

Reactivity: 0

The information contained herein is based on the data available to us. It is believed to be correct. NO warranty, expressed or implied, is made regarding the accuracy of this data or the results to be obtained from the use thereof. For further information consult Maintex.

MSDS Revision Date: 4/21/2015