



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Bathroom Cleaner Ready-to-Use (Product No. 44, Twist 'n Fill™ System)

Product Identification Numbers

LN-DCCX-RTU4-4, 61-0000-6321-6

1.2. Recommended use and restrictions on use

Recommended use

Hard Surface Cleaner. Mild acid cleaner removes soap scum and scale from bathroom surfaces including plastic, porcelain, ceramic, fiberglass, floors and fixtures. Do not use on marble surfaces.

This is a use dilution of a product that meets Green Seal™ Standard GS-37 based on effective performance, concentrated volume, minimized/recycled packaging, and protective limits on: VOCs and human & environmental toxicity. Acute toxicity and skin/eye damage met requirements at the as-used dilution, as specified for closed dilution systems. GreenSeal.org.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Commercial Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	> 95 Trade Secret *
1-OCTYL-2-PYRROLIDINONE	2687-94-7	< 1 Trade Secret *
HYDROXYACETIC ACID	79-14-1	< 1 Trade Secret *
MALIC ACID	6915-15-7	< 1 Trade Secret *
AMINES, COCO ALKYLDIMETHYL, N-OXIDES	61788-90-7	< 0.1 Trade Secret *
ETHOXYLATED C9-11 ALCOHOLS	68439-46-3	< 0.1 Trade Secret *
Fragrance added	Mixture	< 0.1 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

No need for first aid is anticipated.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. NOTE: The above precautionary information presumes that this ready-to-use product has been diluted and dispensed from a chemical dispensing system. Keep out of reach of children. Avoid breathing mist/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

Store away from strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
HYDROXYACETIC ACID	79-14-1	CMRG	TWA:10 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control mist/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Under normal use conditions, eye exposure is not expected to be significant enough to require eye protection.

Skin/hand protection

Under normal use conditions, skin exposure is not expected to be significant enough to require skin protection.

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

General Physical Form:	Liquid
Specific Physical Form:	Liquid
Odor, Color, Grade:	Green liquid with floral fragrance.
Odor threshold	<i>No Data Available</i>
pH	Approximately 3
Melting point	<i>Not Applicable</i>
Boiling Point	>= 212 °F
Flash Point	No flash point
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Specific Gravity	1 [Ref Std: WATER=1]
Solubility in Water	Complete
Solubility- non-water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	Approximately 100
Average particle size	<i>No Data Available</i>
Volatile Organic Compounds	< 0.1 % weight [Test Method: calculated per CARB title 2]
VOC Less H2O & Exempt Solvents	< 40 g/l [Test Method: calculated per CARB title 2]

SECTION 10: Stability and reactivity**10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Strong bases

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
1-OCTYL-2-PYRROLIDINONE	Dermal	Rabbit	LD50 > 2,000 mg/kg
1-OCTYL-2-PYRROLIDINONE	Ingestion	Rat	LD50 2,050 mg/kg
HYDROXYACETIC ACID	Inhalation-Dust/Mist (4 hours)	Rat	LC50 2.5 mg/l
HYDROXYACETIC ACID	Ingestion	Rat	LD50 2,040 mg/kg
MALIC ACID	Ingestion	Rat	LD50 > 3,200 mg/kg
MALIC ACID	Dermal	similar compounds	LD50 > 20,000 mg/kg
MALIC ACID	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 1.306 mg/l
AMINES, COCO ALKYLDIMETHYL, N-OXIDES	Ingestion	Rat	LD50 > 2,000 mg/kg
ETHOXYLATED C9-11 ALCOHOLS	Dermal	Rabbit	LD50 > 2,000 mg/kg
ETHOXYLATED C9-11 ALCOHOLS	Ingestion	Rat	LD50 1,378 mg/kg
Fragrance added	Dermal	Rabbit	LD50 > 5,000 mg/kg
Fragrance added	Ingestion	Rat	LD50 4,498 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
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HYDROXYACETIC ACID	Rabbit	Corrosive
MALIC ACID	Rabbit	Mild irritant
AMINES, COCO ALKYLDIMETHYL, N-OXIDES		Mild irritant
ETHOXYLATED C9-11 ALCOHOLS	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
HYDROXYACETIC ACID	Rabbit	Corrosive
MALIC ACID	Rabbit	Severe irritant
AMINES, COCO ALKYLDIMETHYL, N-OXIDES		Corrosive
ETHOXYLATED C9-11 ALCOHOLS		Corrosive

Skin Sensitization

Name	Species	Value
HYDROXYACETIC ACID	Guinea pig	Not sensitizing
MALIC ACID	similar compounds	Not sensitizing
AMINES, COCO ALKYLDIMETHYL, N-OXIDES	similar compounds	Not sensitizing
ETHOXYLATED C9-11 ALCOHOLS	Guinea pig	Not sensitizing

Respiratory Sensitization

Name	Species	Value
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Germ Cell Mutagenicity

Name	Route	Value
HYDROXYACETIC ACID	In Vitro	Not mutagenic
HYDROXYACETIC ACID	In vivo	Not mutagenic
MALIC ACID	In Vitro	Not mutagenic
ETHOXYLATED C9-11 ALCOHOLS	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
HYDROXYACETIC ACID	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 150 mg/kg/day	during gestation
MALIC ACID	Ingestion	Not toxic to female reproduction	Rat	NOAEL 2,500 mg/kg/day	104 weeks
MALIC ACID	Ingestion	Not toxic to development	Rat	NOAEL 350 mg/kg/day	during organogenesis
MALIC ACID	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,000 mg/kg/day	104 weeks
ETHOXYLATED C9-11 ALCOHOLS	Dermal	Not toxic to female reproduction	Rat	NOAEL 250 mg/kg/day	2 generation
ETHOXYLATED C9-11 ALCOHOLS	Dermal	Not toxic to development	Rat	NOAEL 250 mg/kg/day	2 generation
ETHOXYLATED C9-11 ALCOHOLS	Dermal	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
AMINES, COCO ALKYLDIMETHYL, N-OXIDES	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
ETHOXYLATED C9-11 ALCOHOLS	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HYDROXYACETIC ACID	Inhalation	heart hematopoietic system liver immune system kidney and/or bladder respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.4 mg/l	2 weeks
HYDROXYACETIC ACID	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 400 mg/kg/day	248 days
HYDROXYACETIC ACID	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	90 days
HYDROXYACETIC ACID	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Other	LOAEL 97 mg/kg/day	59 days
HYDROXYACETIC ACID	Ingestion	muscles nervous system	All data are negative	Rat	NOAEL 600 mg/kg/day	90 days
HYDROXYACETIC ACID	Ingestion	respiratory system	All data are negative	Dog	NOAEL 500 mg/kg/day	119 days
MALIC ACID	Ingestion	heart endocrine system hematopoietic system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	104 weeks
ETHOXYLATED C9-11 ALCOHOLS	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 125 mg/kg/day	13 weeks
ETHOXYLATED C9-11 ALCOHOLS	Dermal	hematopoietic system	All data are negative	Rat	NOAEL 125 mg/kg/day	13 weeks

Aspiration Hazard

Name	Value

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

15.2. State Regulations

15.3. Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

15.4. International Regulations

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 1 **Flammability:** 0 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification**Health: 1 Flammability: 0 Physical Hazard: 0 Personal Protection: X** - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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