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Material Safety Data Sheet

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1 Product Identification

Tradename:

3M(TM) MULTI ENZYMATIC INSTRUMENT DETERGENT

Product ID:

CT-0608-7877-5 CT-0608-8056-5 CT-0608-8021-9 CT-0608-8020-1
CT-0608-8019-3

Intended Use of Product:

Industrial use

Division:

ZD - 3M Canada Company

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
WATER	7732-18-5	55 - 65
POLYETHYLENE GLYCOL ALKYL ETHER	Trade Secret	10 - 15
ETHOXYLATED PROPOXYLATED SECONDARY ALCOHOL	Trade Secret	5 - 10
DIOL	Trade Secret	5 - 10
PROTEOLYTIC ENZYME	Trade Secret	1 - 5
FATTY ALCOHOL	Trade Secret	1 - 5
AMYLASE	Trade Secret	1 - 5
ALKOXYLATED ALKANOLAMIDE	Trade Secret	1 - 5
INORGANIC PHOSPHATE	Trade Secret	0.5 - 1.5

ALKALINE METAL POLYSULFONATE	Trade Secret	0.5 - 1.5
ETHOXYLATED PROPOXYLATED ALCOHOL	Trade Secret	0.5 - 1.5
FORMIC ACID SALT	Trade Secret	0.5 - 1.5
ALKALINE METAL SALT	Trade Secret	0.5 - 1.5

NOTE:

DIOL

PROTEOLYTIC ENZYME

AMYLASE

ALKALINE METAL POLYSULFONATE

FORMIC ACID SALT

ALKALINE METAL SALT

are all Trade Secret materials. See section 15 for further details.

FATTY ALCOHOL

ETHOXYLATED PROPOXYLATED SECONDARY ALCOHOL

POLYEHTYLENE GLYCOL ALKYL ETHER

ALKOXYLATED ALKANOLAMIDE

INORGANIC PHOSPHATE

ETHOXYLATED PROPOXYLATED ALCOHOL

are non-hazardous trade secret materials according to WHMIS criteria.

Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

3 Hazards Identification

Critical Hazards:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Allergic Respiratory Reaction: Signs/symptoms can include difficulty breathing, wheezing, cough, and tightness of chest.

May be absorbed following ingestion and cause target organ effects.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Instructions for Skin Contact:

Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Instructions for Inhalation:

Remove person to fresh air. If signs/symptoms develop, get medical attention.

Instructions for Ingestion:

Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

5 Fire Fighting Measures

Flash point: Not applicable

Lower Explosive Limit (%): Not applicable

Upper Explosive Limit (%): Not applicable

Autoignition temperature: Not Available

Suitable Extinguishing Media:

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide). Fire fighting foam can be used to extinguish fire.

Exposure Hazards during Fire:

No data available.

Combustion Products from Fire:

Aldehydes - During Combustion;

Carbon monoxide - During Combustion;

Carbon dioxide - During Combustion;

Fire Fighting Procedures:

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

NFPA: Health 2

NFPA: Fire 1

NFPA: Reactivity 0

NFPA: Unusual Reaction Hazard none

Special Instructions:

Not applicable.

6 Accidental Release Measures

Personal Precautions:

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill.

Spill Response:

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. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

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. Collect as much of the spilled material as possible. Clean up residue with detergent and water. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

7 Handling and Storage

Storage Requirements:

No data available.

Incompatible Materials:

Protect from freezing. Freezing Point: < -9.4 C

Store away from heat; Light; Store out of direct sunlight. Store away from acids; Store away from oxidizing agents. Strong bases;

Ventilation:

No data available.

Use Instructions:

For industrial or professional use only. Avoid contact with oxidizing agents.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Avoid eye contact with vapours, mists, or spray. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Indirect vented goggles;

Hand Protection:

Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns. Avoid skin contact with hot material. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Avoid breathing of vapours, mists or spray. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half facepiece or fullface air-purifying respirator with organic vapour cartridges and N95 particulate prefilters;

Ingestion (Prevention):

Do not eat, drink or smoke when using this product. Wash exposed

areas thoroughly with soap and water.

Recommended Ventilation:

Provide appropriate local exhaust when product is heated. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

Ingredient Exposure Data

WATER (7732-18-5)

LD50 (rat, oral)	> 90 ml/kg
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

POLYETHYLENE GLYCOL ALKYL ETHER (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

ETHOXYLATED PROPOXYLATED SECONDARY ALCOHOL (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

DIOL (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

PROTEOLYTIC ENZYME (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

FATTY ALCOHOL (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

AMYLASE (Trade Secret)

LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	

ALKOXYLATED ALKANOLAMIDE (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

INORGANIC PHOSPHATE (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

ALKALINE METAL POLYSULFONATE (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

ETHOXYLATED PROPOXYLATED ALCOHOL (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

FORMIC ACID SALT (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

ALKALINE METAL SALT (Trade Secret)

LD50 (rat, oral) No data available.

LC50 (rat, inhalation/4 hours) No data available.

Exposure Limits

No data available.

9 Physical and Chemical Properties

Physical form,Color,Odour:	Liquid; amber; pleasant odour; mild odour;
Odour Threshold:	No data available.
pH:	7 DETAILS: 30 ml / 3.79 L (water)
Boiling point/boiling range:	Not Available
Melting point/melting range:	Not applicable
Vapour pressure:	Not applicable
Water Solubility:	Complete
Specific gravity:	1.03 - 1.05 at 25 C
Vapour density:	Not applicable
Volatile organic compounds:	Not Available
Evaporation rate:	No data available.
Viscosity:	No data available.
Percent Volatile:	Not Available

10 Stability and Reactivity

Conditions to Avoid:

Protect from freezing. Freezing Point: < -9.4 C

Store away from heat; Light; Store out of direct sunlight.

Materials to Avoid:

Strong oxidizing agents; Strong acids; Strong bases;

Hazardous Decomposition:

Aldehydes - During Combustion;

Carbon monoxide - During Combustion;

Carbon dioxide - During Combustion;

Stability and Reactivity:

Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Effects from Skin Contact:

Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Effects from Inhalation:

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

Allergic Respiratory Reaction: Signs/symptoms can include difficulty breathing, wheezing, cough, and tightness of chest.

Effects from Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

Sensitization Information:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Allergic Respiratory Reaction: Signs/symptoms can include difficulty breathing, wheezing, cough, and tightness of chest.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Component Based Information:

No data available.

Product Based Information:

No data available.

Other Effects & Information:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

Product Packaging:

No data available.

Special Instructions:

Since regulations vary, consult applicable regulations or authorities before disposal.

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification:

Non-Regulated Material

Special Information:

Contact 3M for more information.

International Dangerous Goods Classification

15 Regulatory Information

WHMIS Classification: D2A, D2B
HMIRC Registry Number: 6548
Filing Date: March 24, 2006

NOTE:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

TSCA - Toxic Substances Control Act (USA)

16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:
Added product id(s) to the MSDS;

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

---End---