3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt 3M Canada Company 1840 Oxford Street East, Post Office Box 5757 London, Ontario N6A 4T1 Medical Emergency Telephone: (519) 451-2500, Ext. 2222 Transportation Emergency Telephone (CANUTEC): (613) 996-6666

Material Cofety Date Cheet

# Material Safety Data Sheet

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Prepared by: Corporate Regulatory Services, 3M Canada Company Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

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### 1 Product Identification

3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT

Product ID:

СТ-0608-7966-6 СТ-0608-7969-0 СТ-0608-7968-2 СТ-0608-7967-4

Intended Use of Product:

Industrial use

Division:

ZD - 3M Canada Company

#### 2 Composition/Information on Ingredients

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Ingredient Name	CAS Number	Percentage
WATER DIOL ETHOXYLATED PROPOXYLATED SECONDARY ALCOHOL	7732-18-5 Trade Secret Trade Secret	55 - 65 5 - 10 5 - 10
GLYCEROL-POLYETHYLENE GLYCOL OXYSTEARATE	Trade Secret	5 - 10
FATTY ALCOHOL PROTEOLYTIC ENZYME ETHOXYLATED PROPOXYLATED ALCOHOL ALKOXYLATED ALKANOLAMIDE BORAX	Trade Secret Trade Secret Trade Secret Trade Secret 1303-96-4	1 - 5 1 - 5 1 - 5 1 - 5 0.5 - 1.5

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## 3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt

ALKALINE METAL POLYSULFONATE	Trade Secret	0.5 - 1.5
AMYLASE	Trade Secret	0.5 - 1.5
INORGANIC PHOSPHATE	Trade Secret	0.5 - 1.5
FORMIC ACID SALT	Trade Secret	0.5 - 1.5
NOTE .		

NOTE:

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 borax (CAS 1303-96-4) a chemical that can cause reproductive and developmental effects based on animal ingestion studies at high doses; such effects are not expected after exposure to products containing this chemical under conditions of normal handling and use. From the Rio Tinto Minerals MSDS for borax: A human study of occupational exposure to borate dust showed no adverse effect on reproduction.

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.

3M(TM) MULTI ENZYMATIC AUTOMATIC	WASHER DETERGENT Page 3 of 9
5 Fire Fighting Measures	
Flash point: Lower Explosive Limit (%): Upper Explosive Limit (%): Autoignition temperature:	Not applicable Not applicable Not applicable Not Available

3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt 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). 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.

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. 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.

3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT Page 4 of 9 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; Strong bases; Store away from oxidizing agents. Ventilation: No data available. Use Instructions: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid breathing of vapours, mists or spray. Avoid skin contact with hot material. Avoid eye contact with vapours, mists, or spray. For industrial or professional use only. Avoid contact with oxidizing agents.

## 8 Exposure Controls/Personal Protection

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## 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

#### 3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT Page 5 of 9

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)

> 90 m1/kg

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

No data available.
DIOL (Trade Secret)
LD50 (rat, oral)
LC50 (rat, inhalation/4 hours) No data available. No data available.

Exposure Limits

No data available.

ETHOXYLATED PROPOXYLATED SECONDARY ALCOHOL (Trade Secret) LD50 (rat, oral) LC50 (rat, inhalation/4 hours) No data available. No data available.

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3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt
            Exposure Limits
              No data available.
          GLYCEROL-POLYETHYLENE GLYCOL OXYSTEARATE (Trade Secret)
                                                  No data available.
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         No data available.
              No data available.
          FATTY ALCOHOL (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                          No data available.
                                                         No data available.
         No data available.
PROTEOLYTIC ENZYME (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
                                                         No data available.
                                                         No data available.
            Exposure Limits
               No data available.
          ETHOXYLATED PROPOXYLATED ALCOHOL (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         No data available.
                                                         No data available.
              No data available.
          ALKOXYLATED ALKANOLAMIDE (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         No data available.
                                                        No data available.
              No data available.
     3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT Page 6 of 9
         BORAX (1303-96-4)
            LD50 (rat, ora1)
                                                          2660 mg/kg
            LC50 (rat, inhalation/4 hours)
                                                          No data available.
            Exposure Limits
              ACGIH: TWA 2 mg/m3 inhalable fraction; (Table A4) ACGIH: STEL 6 mg/m3 inhalable fraction; (Table A4)
          ALKALINE METAL POLYSULFONATE (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
                                                         No data available.
                                                         No data available.
            Exposure Limits
               No data available.
         AMYLASE (Trade Secret)
LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                          No data available.
                                                         No data available.
               No data available.
          INORGANIC PHOSPHATE (Trade Secret)
            LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                          No data available.
                                                          No data available.
         No data available.
FORMIC ACID SALT (Trade Secret)
LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
                                                          No data available.
                                                         No data available.
            Exposure Limits
              No data available.
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9 Physical and Chemical Properties

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3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt
                                                         Liquid; Clear; amber; pleasant odour; mild odour; No data available.
        Physical form, Color, Odour:
        Odour Threshold:
                                                            7 DETAILS: 30 mL/ 3.79 L
        pH:
                                                          of water
                                                         Not Available
        Boiling point/boiling range:
        Melting point/melting range:
                                                         Not applicable
        Vapour pressure:
                                                         Not applicable
        Water Solubility:
Specific gravity:
Vapour density:
Volatile organic compounds:
                                                         Complete
1.03 - 1.05 at 25 C
Not applicable
Not Available
        Evaporation rate:
                                                         No data available.
        Viscosity:
                                                         No data available.
                                                         Not Available
        Percent Volatile:
       3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT Page 7 of 9
       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
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        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.
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3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT (17850-04,17850-05,17850-15,17850-30).txt
         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 borax (CAS 1303-96-4) a chemical that can cause
         reproductive and developmental effects based on animal ingestion
         studies at high doses; such effects are not expected after exposure to products containing this chemical under conditions of normal
    Page 8 of 9
      3M(TM) MULTI ENZYMATIC AUTOMATIC WASHER DETERGENT
         handling and use. From the Rio Tinto Minerals MSDS for borax: A
         human study of occupational exposure to borate dust showed no adverse effect on reproduction.
       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
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15 Regulatory Information

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WHMIS Classification: NOTE: Exempt (Consumer Product)

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)

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#### 16 Other Information

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Reason for Reissue:

The following Sections and topics have been updated or revised:

Section 2 - Composition/Information on Ingredients; Section 3 - Hazards Identification - Critical Hazards;

Section 3 - Hazards Identification - Critical Hazards; Section 11 - Toxicological Information; WHMIS Classification change

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---End---