

Safety Data Sheet

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Document group:31-2015-1Version number:Revision date:19/06/2015Supersedes date:Transportation version number:2.00 (30/10/2012)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

5.00

07/03/2013

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier3M Clean-Trace Water Plus - Total ATP

Product Identification Numbers GH-6205-3811-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Microbiological testing

1.3. Details of the supplier of the safety data sheet

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000E Mail:tox.uk@mmm.comWebsite:www.3M.com/uk

1.4. Emergency telephone number +44 (0)1344 858 000

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:

31-1922-9, 31-1928-6

TRANSPORTATION INFORMATION

GH-6205-3811-2

Not hazardous for transportation

KIT LABEL

2.2. Label elements CLP REGULATION (EC) No 1272/2008

HAZARD STATEMENTS:

H412

Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Disposal:

P501

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

Revision information:

Revision Changes:

Section 01: 1.3. Details of the supplier of the safety data sheet heading information was modified.

Section 1: Product identification numbers heading information was modified.

Copyright information was modified.

Telephone header information was modified.

Company Telephone information was modified.

Label: CLP Classification - Header information was added.

Label: CLP Environmental Hazard Statements information was added.

Label: CLP Precautionary - Disposal information was added.

Label: CLP Precautionary - Disposal - Header information was added.

Label: Precautionary Statement - Header information was added.

Section 1: Identified uses header information was added.

Section 2: 2.2 & 2.3. CLP REGULATION heading information was added.

Label: CLP Percent Unknown - Kit information was added.

Safety phrase information was deleted.

Section 2: Contains heading information was deleted.

Section 2: Safety phrases heading information was deleted.

Section 2: Risk phrase information information was deleted.

Section 2: Risk phrases heading information was deleted.

Kit label ingredient disclosure information information was deleted.

Section 2: Notes on labelling heading information was deleted.

Section 2: Label remarks information was deleted.

Section 2: 2.2 & 2.3. DSD/DPD heading information was deleted.

Label: Graphic information was deleted.

Section 02: Graphic information information was deleted.



Safety Data Sheet

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| Document group: | 31-1922-9 | Version number: | 5.00 |
|------------------------|---------------------------|------------------|------------|
| Revision date: | 19/06/2015 | Supersedes date: | 07/03/2013 |
| Transportation version | number: 1.00 (30/10/2012) | - | |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Clean-Trace Water - Total ATP Extractant (Liquid Stable)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Intermediate

1.3. Details of the supplier of the safety data sheet

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000E Mail:tox.uk@mmm.com

Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements CLP REGULATION (EC) No 1272/2008

HAZARD STATEMENTS:

H412

Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Clean-Trace Water - Total ATP Extractant (Liquid Stable)

Disposal:

P501

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

1% of the mixture consists of components of unknown acute oral toxicity.

Contains 1% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EU Inventory | % by Wt | Classification |
|--|------------|---------------------|---------|-----------------------------|
| Non-hazardous ingredient | Mixture | | 95 - 99 | |
| Tricine Sodium Salt | Unknown | | 0 - 5 | |
| Polyethylene glycol P-1,1,3,3- | 9002-93-1 | | < 1 | |
| tetramethylbutylphenyl ether | | | | |
| D-gluconic acid, compound with N,N"- | 18472-51-0 | EINECS 242- | < 0.1 | Eye Dam. 1, H318; Aquatic |
| bis(4-chlorophenyl)-3,12-diimino- | | 354-0 | | Acute 1, H400,M=10; Aquatic |
| 2,4,11,13-tetraazatetradecanediamidine | | | | Chronic 1, H410,M=10 (Self |
| (2:1) | | | | Classified) |

Please see section 16 for the full text of any H statements referred to in this section Please refer to section 15 for any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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

No need for first aid is anticipated.

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. 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.

5.3. Advice 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. 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.

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.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

Not applicable.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

None required.

Skin/hand protection No chemical protective gloves are required.

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

| P | Physical state | Liquid. |
|--------|--|--|
| A | Appearance/Odour | Clear solution |
| (| Dour threshold | No data available. |
| p | Н | No data available. |
| E | Boiling point/boiling range | No data available. |
| Ν | Aelting point | No data available. |
| F | lammability (solid, gas) | Not applicable. |
| F | Explosive properties | Not classified |
| (| Dxidising properties | Not classified |
| F | lash point | Flash point $> 93 \text{ °C} (200 \text{ °F})$ |
| Α | Autoignition temperature | No data available. |
| F | lammable Limits(LEL) | No data available. |
| F | lammable Limits(UEL) | No data available. |
| V | apour pressure | No data available. |
| F | Relative density | 1.1 [<i>Ref Std</i> :WATER=1] |
| V | Vater solubility | Complete |
| S | olubility- non-water | No data available. |
| P | Partition coefficient: n-octanol/water | No data available. |
| F | Evaporation rate | No data available. |
| V | apour density | No data available. |
| Γ | Decomposition temperature | No data available. |
| V | viscosity | No data available. |
| Ι | Density | No data available. |
| 9.2. 0 | ther information | |
| | Volatile organic compounds (VOC) | No data available. |
| | VOC less H2O & exempt solvents | No data available. |

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products <u>Substance</u> None known.

Condition Not specified.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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 diarrhoea.

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 | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12- | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| diimino-2,4,11,13-tetraazatetradecanediamidine (2:1) | | | |
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12- | Ingestion | Rat | LD50 2,000 mg/kg |
| diimino-2,4,11,13-tetraazatetradecanediamidine (2:1) | | | |
| | | | |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino- 2,4,11,13-tetraazatetradecanediamidine (2:1) | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|-----------|
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino- | Rabbit | Corrosive |
| 2,4,11,13-tetraazatetradecanediamidine (2:1) | | |

Skin Sensitisation

| Name | Species | Value |
|---|--------------|--|
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino- 2,4,11,13-tetraazatetradecanediamidine (2:1) | Human and | Some positive data exist, but the data are not sufficient for classification |
| , , , | animal | |

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|---------------|
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino- 2,4,11,13-tetraazatetradecanediamidine (2:1) | In Vitro | Not mutagenic |
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino- 2,4,11,13-tetraazatetradecanediamidine (2:1) | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---|-----------|----------|------------------|
| D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12- | Ingestion | Multiple | Not carcinogenic |
| diimino-2,4,11,13-tetraazatetradecanediamidine (2:1) | | animal | |
| | | species | |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|--|-----------|--|---------|-----------------------|----------------------|
| D-gluconic acid, compound with N,N"- bis(4-chlorophenyl)-3,12-diimino- 2,4,11,13-tetraazatetradecanediamidine (2:1) | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 30 mg/kg/day | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|------------------------|--|------------------------------|------------------------|----------------------|
| D-gluconic acid, compound with N,N"- bis(4-chlorophenyl)-3,12- diimino-2,4,11,13- tetraazatetradecanediamidi ne (2:1) | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|------------------|-----------|-----------------|-----------------------------------|---------|-------------|----------------------|
| D-gluconic acid, | Ingestion | liver | Some positive data exist, but the | Dog | NOAEL 0.89 | 1 years |

| compound with N,N"- bis(4-chlorophenyl)-3,12- diimino-2,4,11,13- tetraazatetradecanediamidi ne (2:1) | | | data are not sufficient for classification | | mg/kg/day | |
|--|-----------|--|--|--------|-----------------------|---------|
| D-gluconic acid, compound with N,N"- bis(4-chlorophenyl)-3,12- diimino-2,4,11,13- tetraazatetradecanediamidi ne (2:1) | Ingestion | immune system | Some positive data exist, but the data are not sufficient for classification | Rabbit | NOAEL 71 mg/kg/day | 2 years |
| D-gluconic acid, compound with N,N"- bis(4-chlorophenyl)-3,12- diimino-2,4,11,13- tetraazatetradecanediamidi ne (2:1) | Ingestion | hematopoietic system kidney and/or bladder | All data are negative | Rat | NOAEL 71 mg/kg/day | 2 years |

Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

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

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS Nbr | Organism | Туре | Exposure | Test endpoint | Test result |
|-----------------|------------|-------------|--------------|----------|---------------|-------------|
| D-gluconic | 18472-51-0 | Zebra Fish | Experimental | 96 hours | LC50 | 10.4 mg/l |
| acid, | | | | | | |
| compound with | | | | | | |
| N,N"-bis(4- | | | | | | |
| chlorophenyl)- | | | | | | |
| 3,12-diimino- | | | | | | |
| 2,4,11,13- | | | | | | |
| tetraazatetrade | | | | | | |
| canediamidine | | | | | | |
| (2:1) | | | | | | |
| D-gluconic | 18472-51-0 | Green algae | Experimental | 72 hours | EC50 | 0.011 mg/l |
| acid, | | | | | | |
| compound with | | | | | | |
| N,N"-bis(4- | | | | | | |
| chlorophenyl)- | | | | | | |
| 3,12-diimino- | | | | | | |
| 2,4,11,13- | | | | | | |
| tetraazatetrade | | | | | | |
| canediamidine | | | | | | |
| (2:1) | | | | | | |
| D-gluconic | 18472-51-0 | Water flea | Experimental | 48 hours | EC50 | <0.1 mg/l |
| acid, | | | | | | |
| compound with | | | | | | |

| N,N"-bis(4- | | | | | | |
|---------------------------------|-----------|-------------|--------------|-----------|------|------------|
| chlorophenyl)- 3,12-diimino- | | | | | | |
| 2,4,11,13- | | | | | | |
| tetraazatetrade | | | | | | |
| canediamidine | | | | | | |
| (2:1) | | | | | | |
| Polyethylene | 9002-93-1 | Green algae | Experimental | 72 hours | EC50 | >220 mg/l |
| glycol P- | 5002 55 1 | Green uigue | Experimental | 72 110015 | Leso | · 220 mg/r |
| 1,1,3,3- | | | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | | | | | | |
| Polyethylene | 9002-93-1 | Crustacea | Experimental | 48 hours | EC50 | 5.85 mg/l |
| glycol P- | | | 1 | | | C |
| 1,1,3,3- | | | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | | | | | | |
| Polyethylene | 9002-93-1 | Fathead | Experimental | 96 hours | LC50 | 4.5 mg/l |
| glycol P- | | minnow | | | | |
| 1,1,3,3- | | | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | | | | | | |
| Polyethylene | 9002-93-1 | Water flea | Experimental | 21 days | NOEC | 4.6 mg/l |
| glycol P- | | | | | | |
| 1,1,3,3- | | | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | | | | | | |
| Polyethylene | 9002-93-1 | Green algae | Experimental | 72 hours | NOEC | 22 mg/l |
| glycol P- | | | | | | |
| 1,1,3,3- | | | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | <u> </u> | | | | | |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|-----------------|------------|------------------|----------|------------|-------------|---------------|
| D-gluconic | 18472-51-0 | Estimated | 28 days | BOD | 0 % weight | Other methods |
| acid, | | Biodegradation | | | | |
| compound with | | | | | | |
| N,N"-bis(4- | | | | | | |
| chlorophenyl)- | | | | | | |
| 3,12-diimino- | | | | | | |
| 2,4,11,13- | | | | | | |
| tetraazatetrade | | | | | | |
| canediamidine | | | | | | |
| (2:1) | | | | | | |
| Polyethylene | 9002-93-1 | Data not | N/A | N/A | N/A | N/A |
| glycol P- | | available or | | | | |
| 1,1,3,3- | | insufficient for | | | | |
| tetramethylbut | | classification | | | | |
| ylphenyl ether | | | | | | |

12.3 : Bioaccumulative potential

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|----------|---------|-----------|----------|------------|-------------|----------|
| | | | | | | |

Clean-Trace Water - Total ATP Extractant (Liquid Stable)

| D-gluconic | 18472-51-0 | Data not | N/A | N/A | N/A | N/A |
|-----------------|------------|------------------|-----|---------------|-----|---------------|
| acid, | | available or | | | | |
| compound with | | insufficient for | | | | |
| N,N"-bis(4- | | classification | | | | |
| chlorophenyl)- | | | | | | |
| 3,12-diimino- | | | | | | |
| 2,4,11,13- | | | | | | |
| tetraazatetrade | | | | | | |
| canediamidine | | | | | | |
| (2:1) | | | | | | |
| Polyethylene | 9002-93-1 | Estimated | | Bioaccumulati | 741 | Other methods |
| glycol P- | | Bioconcentrati | | on factor | | |
| 1,1,3,3- | | on | | | | |
| tetramethylbut | | | | | | |
| ylphenyl ether | | | | | | |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

160506* Laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

SECTION 14: Transportation information

ADR/IMDG/IATA: Not restricted for transport.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment Not applicable

SECTION 16: Other information

List of relevant H statements

| H318 | Causes serious eye damage. |
|------|---|
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

Revision Changes: Section 01: 1.3. Details of the supplier of the safety data sheet heading information was modified. Section 3: Composition/ Information of ingredients table information was modified. Copyright information was modified. Label: CLP Percent Unknown information was modified. Label: CLP Percent Unknown information was modified. Section 3: Reference to section 15 for Nota info information was modified. Telephone header information was modified. Company Telephone information was modified. Section 11: Acute Toxicity table information was modified. Section 11: Carcinogenicity Table information was modified. Section 11: Serious Eye Damage/Irritation Table information was modified. Section 11: Germ Cell Mutagenicity Table information was modified. Section 11: Skin Sensitization Table information was modified. Section 11: Reproductive Toxicity Table information was modified. Section 11: Skin Corrosion/Irritation Table information was modified. Section 11: Target Organs - Repeated Table information was modified. Section 11: Target Organs - Single Table information was modified. Section 5: Fire - Extinguishing media information information was modified. Section 5: Fire - Advice for fire fighters information information was modified. Section 6: Accidental release clean-up information information was modified. Section 7: Precautions safe handling information information was modified. Section 7: Conditions safe storage information was modified. Section 8: Appropriate Engineering controls information information was modified. Section 8: Personal Protection - Skin/hand information information was modified. Section 8: Personal Protection - Respiratory Information information was modified. Section 13: 13.1. Waste disposal note information was modified. Section 13: Standard Phrase Category Waste GHS information was modified. Section 4: First aid for eye contact information information was modified. Section 4: First aid for skin contact information information was modified. Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified. Section 8: Respiratory protection - recommended respirators information information was added. Section 8: Respiratory protection - recommended respirators guide information was added. Section 8: Eye protection information information was added. Section 12: Component ecotoxicity information information was added. Section 12: Persistence and Degradability information information was added. Section 12:Bioccumulative potential information information was added. Section 12: Component Ecotoxicity table Material column header information was added.

Section 12: Component Ecotoxicity table CAS No column header information was added. Section 12: Component Ecotoxicity table Organism column header information was added. Section 12: Component Ecotoxicity table Type column header information was added. Section 12: Component Ecotoxicity table Exposure column header information was added. Section 12: Component Ecotoxicity table End point column header information was added. Section 12: Component Ecotoxicity table Result column header information was added. Section 12: Persistence and degradability table Material column header information was added. Section 12: Persistence and degradability table CAS No column header information was added. Section 12: Persistence and degradability table Test Type column header information was added. Section 12: Persistence and degradability table Duration column header information was added. Section 12: Persistence and degradability table Test Result column header information was added. Section 12: Persistence and degradability table Protocol column header information was added. Section 12:Bioccumulative potential table Material column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table Test Result column header information was added. Section 12:Bioccumulative potential table Protocol column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Section 12: Persistence and degradability table Study Type column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Section 11: Disclosed components not in tables text information was added. Section 12: Classification Warning information was added. Section 11: Classification disclaimer information was added. Section 11: Aspiration Hazard text information was added. Section 8: 8.1.1 Biological limit values table heading information was added. Section 8: BLV information was added. Section 11: Respiratory Sensitization text information was added. Section 11: Skin Sensitization table - Name heading information was added. Section 11: Skin Sensitization table - Species heading information was added. Section 11: Skin Sensitization table - Value heading information was added. Section 11: Serious Eye Damage/Irritation table - Name heading information was added. Section 11: Serious Eye Damage/Irritation table - Species heading information was added. Section 11: Serious Eye Damage/Irritation table - Value heading information was added. Section 11: Skin Corrosion/Irritation table - Name heading information was added. Section 11: Skin Corrosion/Irritation table - Species heading information was added. 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Clean-Trace Water - Total ATP Extractant (Liquid Stable)

Section 11: Reproductive and/or Developmental Effects table - Species heading information was added. Section 11: Reproductive and/or Developmental Effects table - Test Result heading information was added. Section 11: Reproductive and/or Developmental Effects text information was added. Section 11: Carcinogenicity table - Name heading information was added. Section 11: Carcinogenicity table - Route heading information was added. Section 11: Carcinogenicity table - Species heading information was added. Section 11: Carcinogenicity table - Value heading information was added. Section 03: Reference to H statement explanation in Section 016 information was added. Section 8: Eye/face protection information information was deleted. Risk phrase information was deleted. Safety phrase information was deleted. Section 8: Eye/face protection text information was deleted. Section 2: Contains heading information was deleted. Section 2: Safety phrases heading information was deleted. Section 16: List of relevant R-phrases information was deleted. Section 2: Indication of danger heading information was deleted. Section 16: List of relevant R phrase information information was deleted. Section 2: Risk phrases heading information was deleted. Section 2: Indication of danger information information was deleted. Section 2: Label ingredient information information was deleted. Section 12: Acute aquatic hazard information information was deleted. Section 12: Chronic aquatic hazard heading information was deleted. Section 12: Acute aquatic hazard heading information was deleted. Section 12: Chronic aquatic hazard information information was deleted. Prints No Data if Component ecotoxicity information is not present information was deleted. Prints No Data if Persistence and Degradability information is not present information was deleted. Prints No Data if Bioccumulative potential information is not present information was deleted. Section 11: Aspiration Hazard Table information was deleted. Section 11: Classification disclaimer information was deleted. Section 11: Exposure Duration table heading information was deleted. Section 11: Respiratory Sensitization Table information was deleted. Section 11: Test Result table heading information was deleted. Section 3: Reference to R and H statement explanation in Section 16 information was deleted. Section 12: Classification Warning information was deleted. Section 2: 2.2 & 2.3. DSD/DPD heading information was deleted. Section 8: Personal Protection - Eye information information was deleted. Section 2: R phrase reference information was deleted. Label: Graphic information was deleted. Section 02: Graphic information information was deleted.

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3M United Kingdom MSDSs are available at www.3M.com/uk



Safety Data Sheet

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| Transportation version | number: 1.00 (29/10/2012) | | |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Clean-Trace Water Liquid Stable Enzyme Reagent

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Intermediate

1.3. Details of the supplier of the safety data sheet

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000

- E Mail: tox.uk@mmm.com
- Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

2.2. Label elements CLP REGULATION (EC) No 1272/2008 Not applicable

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EU Inventory | % by Wt | Classification |
|---------------------------|---------|---------------------|---------|----------------|
| Non hazardous ingredients | Mixture | | 70 - 80 | |
| D-glucitol | Mixture | | 15 - 25 | |

Please see section 16 for the full text of any H statements referred to in this section

Please refer to section 15 for any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation No need for first aid is anticipated.

Skin contact No need for first aid is anticipated.

to need for first and is anticipated

Eye contact No need for first aid is anticipated.

If swallowed

No need for first aid is anticipated.

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. 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.

5.3. Advice 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. Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

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. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No specific handling precautions are necessary.

7.2. Conditions for safe storage including any incompatibilities

Not applicable.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection None required.

Skin/hand protection

No chemical protective gloves are required.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Appearance/Odour Odour threshold pH Boiling point/boiling range Liquid. Clear to light yellow liquid No data available. No data available. No data available.

| Melting point | No data available. |
|---|--|
| Flammability (solid, gas) | Not applicable. |
| Explosive properties | Not classified |
| Oxidising properties | Not classified |
| Flash point | Flash point $> 93 \text{ °C} (200 \text{ °F})$ |
| Autoignition temperature | No data available. |
| Flammable Limits(LEL) | No data available. |
| Flammable Limits(UEL) | No data available. |
| Vapour pressure | No data available. |
| Relative density | ≥ 1 [<i>Ref Std</i> :WATER=1] |
| Water solubility | No data available. |
| Solubility- non-water | No data available. |
| Partition coefficient: n-octanol/water | No data available. |
| Evaporation rate | No data available. |
| Vapour density | No data available. |
| Decomposition temperature | No data available. |
| Viscosity | No data available. |
| Density | No data available. |
| 9.2. Other information | |
| Volatile organic compounds (VOC) | 0 |
| Percent volatile | 0 |
| VOC less H2O & exempt solvents | 0 |

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

Carbon monoxide. Carbon dioxide. Oxides of nitrogen. <u>Condition</u> Not specified. Not specified. Not specified.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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

No known health effects.

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

No known health effects.

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 | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| D-glucitol | Dermal | Professio nal judgeme nt | LD50 estimated to be > 5,000 mg/kg |
| D-glucitol | Ingestion | Rat | LD50 15,900 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Serious Eye Damage/Irritation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Skin Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

Carcinogenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

Reproductive Toxicity

Reproductive and/or Developmental Effects

For the component/components, either no data is currently available or the data is not sufficient for classification.

Target Organ(s)

Clean-Trace Water Liquid Stable Enzyme Reagent

Specific Target Organ Toxicity - single exposure

For the component/components, either no data is currently available or the data is not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

For the component/components, either no data is currently available or the data is not sufficient for classification.

Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

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

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS Nbr | Organism | Туре | Exposure | Test endpoint | Test result |
|------------|---------|----------|------------------|----------|---------------|-------------|
| D-glucitol | Mixture | | Data not | | | |
| | | | available or | | | |
| | | | insufficient for | | | |
| | | | classification | | | |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|------------|---------|----------------|----------|------------|-------------|------------------|
| D-glucitol | Mixture | Experimental | 14 days | BOD | 81 % weight | OECD 301C - MITI |
| | | Biodegradation | | | | test (I) |

12.3 : Bioaccumulative potential

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|------------|---------|----------------|----------|------------|-------------|---------------|
| D-glucitol | Mixture | Experimental | | Log Kow | -2.20 | Other methods |
| | | Bioconcentrati | | | | |
| | | on | | | | |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

This product has been classified as a non-hazardous waste. 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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

160509 Discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

SECTION 14: Transportation information

ADR/IMDG/IATA: Not Restricted for Transport

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Revision information:

Revision Changes:

Section 01: 1.3. Details of the supplier of the safety data sheet heading information was modified.

Section 3: Composition/ Information of ingredients table information was modified.

Copyright information was modified.

Section 9: Property description for optional properties information was modified.

Section 3: Reference to section 15 for Nota info information was modified.

Telephone header information was modified.

Company Telephone information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Health Effects - Ingestion information information was modified.

Section 5: Fire - Extinguishing media information information was modified.

Section 5: Fire - Advice for fire fighters information information was modified.

Section 6: Accidental release clean-up information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 7: Conditions safe storage information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 13: 13.1. Waste disposal note information was modified.

Section 4: First aid for eye contact information information was modified.

Section 4: First aid for skin contact information information was modified. Section 8: Respiratory protection information information was added. Section 8: Eye protection information information was added. Section 12: Component ecotoxicity information information was added. Section 12: Persistence and Degradability information information was added. Section 12:Bioccumulative potential information information was added. Section 12: Component Ecotoxicity table Material column header information was added. Section 12: Component Ecotoxicity table CAS No column header information was added. Section 12: Component Ecotoxicity table Organism column header information was added. Section 12: Component Ecotoxicity table Type column header information was added. Section 12: Component Ecotoxicity table Exposure column header information was added. Section 12: Component Ecotoxicity table End point column header information was added. Section 12: Component Ecotoxicity table Result column header information was added. Section 12: Persistence and degradability table Material column header information was added. Section 12: Persistence and degradability table CAS No column header information was added. Section 12: Persistence and degradability table Test Type column header information was added. Section 12: Persistence and degradability table Duration column header information was added. Section 12: Persistence and degradability table Test Result column header information was added. Section 12: Persistence and degradability table Protocol column header information was added. Section 12:Bioccumulative potential table Material column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table Test Result column header information was added. Section 12:Bioccumulative potential table Protocol column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Label: CLP Classification - Header information was added. Label: CLP Classification information was added. Section 2: 2.2 & 2.3. CLP REGULATION heading information was added. Section 12: Persistence and degradability table Study Type column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Section 02: EU CLP 'Not applicable' text information was added. Section 11: Disclosed components not in tables text information was added. Section 12: Classification Warning information was added. Section 11: Classification disclaimer information was added. Section 11: Aspiration Hazard text information was added. Section 8: 8.1.1 Biological limit values table heading information was added. Section 8: BLV information was added. Section 11: Respiratory Sensitization text information was added. Section 11: Skin Sensitization text information was added. Section 11: Serious Eye Damage/Irritation text information was added. Section 11: Skin Corrosion/Irritation text information was added. Section 11: Germ Cell Mutagenicity text information was added. Section 11: Specific Target Organ Toxicity - repeated exposure text information was added. Section 11: Specific Target Organ Toxicity - single exposure text information was added. Section 11: Specific Target Organ Toxicity - single exposure text information was added. Section 11: Carcinogenicity text information was added. Section 03: Reference to H statement explanation in Section 016 information was added. Section 8: Eye/face protection information information was deleted. Section 8: Eve/face protection text information was deleted. Section 2: Contains heading information was deleted. Section 2: Safety phrases heading information was deleted. Section 2: Risk phrases heading information was deleted. Section 15: Symbol information information was deleted. Section 2: Label ingredient information information was deleted. Section 12: Acute aquatic hazard information information was deleted. Section 12: Chronic aquatic hazard heading information was deleted.

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Section 02: Graphic information information was deleted.

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