

Safety Data Sheet

Copyright, 2016, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document Group:
 22-4251-9
 Version Number:
 3.00

 Issue Date:
 08/09/16
 Supercedes Date:
 07/23/14

SECTION 1: Identification

1.1. Product identifier

3MTM Heavy Duty Degreaser Concentrate

Product Identification Numbers

ID Number UPC ID Number UPC

70-0713-1377-2 500-48011-34782-5 70-0716-8328-1 500-48011-34782-5

1.2. Recommended use and restrictions on use

Recommended use

Hard Surface Cleaner

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

Corrosive to metal: Category 1.

Acute Toxicity (inhalation): Category 4. Serious Eye Damage/Irritation: Category 1. Skin Corrosion/Irritation: Category 1B.

Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Corrosion | Exclamation mark | Health Hazard |

Page 1 of 13

Pictograms



Hazard Statements

May be corrosive to metals.

Causes severe skin burns and eye damage.

Harmful if inhaled.

Causes damage to organs:

blood or blood-forming organs |

Causes damage to organs through prolonged or repeated exposure:

blood or blood-forming organs |

Precautionary Statements

Prevention:

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing, and eye/face protection.

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

Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Absorb spillage to prevent material damage.

Storage:

Store in a corrosive resistant container with a resistant inner liner.

Store locked up.

Disposal:

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

2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.

5% of the mixture consists of ingredients of unknown acute oral toxicity.

11% of the mixture consists of ingredients of unknown acute dermal toxicity.

19% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Page 2 **of** 13

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	60 - 90 Trade Secret *
2-BUTOXYETHANOL	111-76-2	5 - 10 Trade Secret *
SODIUM DODECYLBENZENE SULFONATE	25155-30-0	1 - 5 Trade Secret *
SODIUM SILICATE	1344-09-8	1 - 5 Trade Secret *
SODIUM XYLENE SULFONATE	1300-72-7	1 - 5 Trade Secret *
SODIUM HYDROXIDE	1310-73-2	1 - 5 Trade Secret *
TETRASODIUM	64-02-8	0.1 - 1 Trade Secret *
ETHYLENEDIAMINETETRAACETATE		
SODIUM SULFATE	7757-82-6	0.1 - 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:

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate 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. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

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

Evacuate area. 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. 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. For large spills, if necessary, get assistance from professional spill clean up team. For small spills, carefully neutralize spill by adding appropriate dilute acid such as vinegar. Work slowly to avoid boiling or spattering. Continue to add neutralizing agent until reaction stops. Let cool before collecting. Or use a commercially available caustic (alkaline or basic) spill clean-up kit. Follow kit directions exactly. 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 metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Clean up residue with water. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep only in original container. Store in a corrosive resistant container with a resistant inner liner. Store away from acids. Keep/store away from clothing and other combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
2-BUTOXYETHANOL	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal
				carcin.
2-BUTOXYETHANOL	111-76-2	OSHA	TWA:240 mg/m3(50 ppm)	SKIN
SODIUM HYDROXIDE	1310-73-2	ACGIH	CEIL:2 mg/m3	
SODIUM HYDROXIDE	1310-73-2	CMRG	TWA:2 mg/m3	
SODIUM HYDROXIDE	1310-73-2	OSHA	TWA:2 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

Dage A of 1

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Butyl Rubber

Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber Apron - polymer laminate

Boots - Rubber

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:

Full facepiece air-purifying respirator suitable for organic vapors

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 characteristc odor

Odor threshold No Data Available 12.5 - 13.5pН **Melting point** Not Applicable **Boiling Point** $> 212 \, {}^{\circ}F$ **Flash Point** No flash point **Evaporation rate** No Data Available Flammability (solid, gas) Not Applicable No Data Available

Flammable Limits(LEL) Flammable Limits(UEL) No Data Available Vapor Pressure No Data Available Vapor Density No Data Available **Density** No Data Available

Specific Gravity 1.04858 [*Ref Std:* WATER=1]

Solubility in Water Complete

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity< 100 centipoise</th>

Volatile Organic Compounds 5 - 15 % weight [Test Method: calculated per CARB title 2]

 Percent volatile
 60 - 90 %

 VOC Less H2O & Exempt Solvents
 490 - 550 g/l

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 acids Aluminum Zinc

10.6. Hazardous decomposition products

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot Specified

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:

Harmful if inhaled.

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

Page 6 **of** 13

May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin.

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

Prolonged or repeated exposure may cause target organ effects:

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

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 2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE 10 - 20 mg/l
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
2-BUTOXYETHANOL	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-BUTOXYETHANOL	Inhalation- Vapor (4 hours)	Guinea pig	LC50 > 2.6 mg/l
2-BUTOXYETHANOL	Ingestion	Guinea pig	LD50 1,414 mg/kg
SODIUM XYLENE SULFONATE	Dermal		LD50 estimated to be > 5,000 mg/kg
SODIUM SILICATE	Dermal	Rabbit	LD50 > 4,640 mg/kg
SODIUM DODECYLBENZENE SULFONATE	Dermal	Rat	LD50 > 2,000 mg/kg
SODIUM DODECYLBENZENE SULFONATE	Ingestion	Rat	LD50 1,260 mg/kg
SODIUM SILICATE	Ingestion	Rat	LD50 500 mg/kg
SODIUM XYLENE SULFONATE	Ingestion	Rat	LD50 > 5,000 mg/kg
SODIUM SULFATE	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.4 mg/l
SODIUM SULFATE	Ingestion	Rat	LD50 > 10,000 mg/kg
TETRASODIUM ETHYLENEDIAMINETETRAACETATE	Ingestion	Rat	LD50 1,658 mg/kg
SODIUM SULFATE	Dermal	similar health	LD50 estimated to be > 5,000 mg/kg

Page 7 **of** 13

	hazards	
ATE		

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro	Corrosive
	data	
2-BUTOXYETHANOL	Rabbit	Irritant
SODIUM DODECYLBENZENE SULFONATE	Rabbit	Irritant
SODIUM HYDROXIDE	Rabbit	Corrosive
SODIUM SILICATE	Rabbit	Corrosive
SODIUM SULFATE	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name		Value
2-BUTOXYETHANOL	Rabbit	Severe irritant
SODIUM DODECYLBENZENE SULFONATE	Rabbit	Corrosive
SODIUM HYDROXIDE	Rabbit	Corrosive
SODIUM SILICATE	Rabbit	Corrosive
SODIUM SULFATE	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
2-BUTOXYETHANOL	Guinea	Not sensitizing
	pig	
SODIUM DODECYLBENZENE SULFONATE	Guinea	Some positive data exist, but the data are not
	pig	sufficient for classification
SODIUM HYDROXIDE	Human	Not sensitizing
SODIUM SILICATE	Mouse	Not sensitizing
SODIUM SULFATE	Guinea	Not sensitizing
	pig	

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
2-BUTOXYETHANOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
SODIUM DODECYLBENZENE SULFONATE	In Vitro	Not mutagenic
SODIUM DODECYLBENZENE SULFONATE	In vivo	Not mutagenic
SODIUM HYDROXIDE	In Vitro	Not mutagenic
SODIUM SILICATE	In Vitro	Not mutagenic
SODIUM SILICATE	In vivo	Not mutagenic
SODIUM SULFATE	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
2-BUTOXYETHANOL	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
SODIUM DODECYLBENZENE SULFONATE	Dermal	Mouse	Not carcinogenic
SODIUM DODECYLBENZENE SULFONATE	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

<u> </u>					
Name	Route	Value	Species	Test Result	Exposure

					Duration
2-BUTOXYETHANOL	Dermal	Not toxic to development	Rat	NOAEL 1,760	during
				mg/kg/day	gestation
2-BUTOXYETHANOL	Ingestion	Some positive developmental data exist,	Rat	NOAEL 100	during
		but the data are not sufficient for		mg/kg/day	organogenesi
		classification			S
2-BUTOXYETHANOL	Inhalation	Some positive developmental data exist,	Multiple	NOAEL 0.48	during
		but the data are not sufficient for	animal	mg/l	organogenesi
		classification	species		S
SODIUM DODECYLBENZENE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 350	3 generation
SULFONATE				mg/kg/day	
SODIUM DODECYLBENZENE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 350	3 generation
SULFONATE				mg/kg/day	
SODIUM DODECYLBENZENE	Dermal	Some positive developmental data exist,	Mouse	NOAEL 1,500	during .
SULFONATE		but the data are not sufficient for		mg/kg/day	organogenesi
GODWIN (DODEGUM DELVIEW		classification	3.5	7 O 1 TT 200	S
SODIUM DODECYLBENZENE	Ingestion	Some positive developmental data exist,	Mouse	LOAEL 300	during .
SULFONATE		but the data are not sufficient for		mg/kg/day	organogenesi
CODURACIONES	*	classification	3.6	NO LET 200	S
SODIUM SILICATE	Ingestion	Some positive developmental data exist, but the data are not sufficient for	Mouse	NOAEL 200	during
		classification		mg/kg/day	gestation
SODIUM SULFATE	Dermal		Rabbit	NOAEL 5.328	(5.4
SODIUM SULFATE	Dermai	Not toxic to female reproduction	Kabbit	mg/kg/day	65 days
SODIUM SULFATE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000	manatina
SODIUM SULFATE	ingestion	Not toxic to female reproduction	Kat	mg/kg/day	premating into lactation
SODIUM SULFATE	Dermal	N-44	Rabbit	NOAEL 5.328	
SODIUM SULFATE	Dermai	Not toxic to male reproduction	Kabbit		65 days
SODIUM SULFATE	Ingostica	Not toxic to male reproduction	Rat	mg/kg/day NOAEL 1.000	4 weeks
SODIUM SULFATE	Ingestion	Not toxic to male reproduction	Kat	, ,	4 weeks
CODILINA CLIL EATE	To a seti	N-44	Rat	mg/kg/day	
SODIUM SULFATE	Ingestion	Not toxic to development	Kat	NOAEL 1,000	premating into lactation
				mg/kg/day	into factation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2-BUTOXYETHANOL	Dermal	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 902 mg/kg	6 hours
2-BUTOXYETHANOL	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 72 mg/kg	not available
2-BUTOXYETHANOL	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 451 mg/kg	6 hours
2-BUTOXYETHANOL	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
2-BUTOXYETHANOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-BUTOXYETHANOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-BUTOXYETHANOL	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
2-BUTOXYETHANOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-BUTOXYETHANOL	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
2-BUTOXYETHANOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for	Human	NOAEL Not available	poisoning and/or abuse

Page 9 **of** 13

			classification			
SODIUM HYDROXIDE	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not	
					available	
SODIUM SILICATE	Inhalation	respiratory irritation	May cause respiratory irritation	official	NOAEL Not	
				classifica	available	
				tion		
SODIUM SULFATE	Inhalation	respiratory irritation	All data are negative	Human	Irritation Not	
			_	and	available	
				animal		

Specific Target Organ Toxicity - repeated exposure

Name Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
2-BUTOXYETHANOL	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	Duration not available
2-BUTOXYETHANOL	Dermal	endocrine system	All data are negative	Rabbit	NOAEL 150 mg/kg/day	90 days
2-BUTOXYETHANOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	14 weeks
2-BUTOXYETHANOL	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.15 mg/l	14 weeks
2-BUTOXYETHANOL	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.15 mg/l	6 months
2-BUTOXYETHANOL	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 1.9 mg/l	8 days
2-BUTOXYETHANOL	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 69 mg/kg/day	13 weeks
2-BUTOXYETHANOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
SODIUM DODECYLBENZENE SULFONATE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 40 mg/kg/day	6 months
SODIUM DODECYLBENZENE SULFONATE	Ingestion	hematopoietic system liver	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 150 mg/kg/day	6 months
SODIUM SILICATE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 2,400 mg/kg/day	4 weeks
SODIUM SILICATE	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 804 mg/kg/day	3 months
SODIUM SILICATE	Ingestion	blood	All data are negative	Rat	NOAEL 804 mg/kg/day	3 months
SODIUM SILICATE	Ingestion	heart liver	All data are negative	Rat	NOAEL 1,259 mg/kg/day	8 weeks
SODIUM SULFATE	Dermal	heart skin endocrine system hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	All data are negative	Rabbit	NOAEL 5,328 mg/kg/day	65 days
SODIUM SULFATE	Ingestion	hematopoietic system eyes kidney and/or bladder	All data are negative	Rat	NOAEL 2,000 mg/kg/day	4 weeks

Page 10 of 13

3M™ Heavy Duty Degreaser Concentrate 08/09/16

Aspiration Hazard

For the component/components, either no data are currently available or the data are 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

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.

Dispose of waste product in a permitted industrial waste facility. 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.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

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 - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient 2-BUTOXYETHANOL (GLYCOL ETHERS)

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 Japan Chemical Substance 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: 3 Flammability: 0 Instability: 0 Special Hazards: None

Acid/Base: Alkaline Corrosive: Yes

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: 3 Flammability: 0 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) 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® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group: 22-4251-9 **Version Number:** 3.00 **Issue Date:** 08/09/16 **Supercedes Date:** 07/23/14

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY 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.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

Page 12 of 13

3M USA SDSs are available at www.3M.com