Safety Data Sheet

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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
All Purpose Cleaner (Detailer) D104 [D10401 D10405]

Product Identification Numbers
14-1000-8781-7 14-1001-5516-8

7100151937 7100315409

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

Identified uses
Automotive.

1.3. Details of the supplier of the safety data sheet

Address:	Meguiars United Kingdom Limited, 3 Lamport Court, Heartlands, Daventry, Northants, NN11 8UF
Telephone:	+44 (0)870 241 6696
E Mail:	info@meguiars.co.uk
Website:	www.meguiars.co.uk

1.4. Emergency telephone number
Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

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

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.
This material has been tested for skin corrosion/irritation and the test results are reflected in the assigned classification.

CLASSIFICATION:
Substance or Mixture Corrosive to Metals, Category 1 - Met. Corr. 1; H290
Skin Corrosion/Irritation, Category 1B - Skin Corr. 1B; H314
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335
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

SIGNAL WORD
DANGER.

Symbols
GHS05 (Corrosion) |GHS07 (Exclamation mark) |

Pictograms

HAZARD STATEMENTS:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P260E	Do not breathe vapour or spray.
P280D	Wear protective gloves, protective clothing, and eye/face protection.

Response:

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE or doctor/physician.

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH208	Contains Oils, orange, sweet. | (R)-p-mentha-1,8-diene. May produce an allergic reaction.

4% of the mixture consists of components of unknown acute inhalation toxicity.

Notes on labelling
Updated per Regulation (EC) No. 648/2004 on detergents.
Ingredients required per 648/2004: <5%: Non-ionic surfactants, EDTA and salts thereof, cationic surfactant. Contains:

Perfumes, d-limonene, linalool.

2.3. Other hazards

None known.
This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Non-Hazardous Ingredients	Mixture	60 - 100	Substance not classified as hazardous
Alcohols, C9-11, ethoxylated	(CAS-No.) 68439-46-3	0.5 - 1.5	Eye Irrit. 2, H319 Aquatic Chronic 3, H412
Alcohols, C7-21, ethoxylated	(CAS-No.) 68991-48-0	< 5	EUH066 Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
POTASSIUM SILICATE	(CAS-No.) 1312-76-1 (EC-No.) 215-199-1	1 - 3	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335
tetrasodium ethylene diamine tetraacetate	(CAS-No.) 64-02-8 (EC-No.) 200-573-9 (REACH-No.) 01-2119486762-27	1 - 3	Acute Tox. 4, H302 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT RE 2, H373
Oils, orange, sweet	(CAS-No.) 8008-57-9	< 1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
potassium hydroxide	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3	< 1	Acute Tox. 3, H301 Skin Corr. 1A, H314 Met. Corr. 1, H290
(R)-p-mentha-1,8-diene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (REACH-No.) 01-2119529223-47	< 1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412 Nota C

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits

potassium hydroxide	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3	(C >= 5%) Skin Corr. 1A, H314 (2% =< C < 5%) Skin Corr. 1B, H314 (0.5% =< C < 2%) Skin Irrit. 2, H315 (0.5% =< C < 2%) Eye Irrit. 2, H319
POTASSIUM SILICATE	(CAS-No.) 1312-76-1 (EC-No.) 215-199-1	(C >= 50%) Skin Corr. 1C, H314 (40% =< C < 50%) Skin Irrit. 2, H315 (C >= 50%) Eye Dam. 1, H318 (40% =< C < 50%) Eye Irrit. 2, H319

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
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
The most important symptoms and effects based on the CLP classification include:
Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.

5.3. Advice for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

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 vapours, 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 dykes 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 neutralise spill by adding appropriate dilute acid such as vinegar. Work slowly to avoid boiling or spattering. Continue to add neutralising agent until reaction stops. Let cool before collecting. 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. Cover, but do not seal for 48 hours. 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
Keep out of reach of children. Do not breathe dust/fume/gas/mist/vapours/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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminium, 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 container tightly closed. Keep only in original container. Store in a corrosive resistant container with a resistant inner liner. Store away from acids. Store away from oxidising agents.

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
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	CAS Nbr	Agency	Limit type	Additional comments
potassium hydroxide	1310-58-3	Ireland OELs	STEL(15 minutes):2 mg/m3	

Ireland OELs : Ireland. OELs
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

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

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/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.

Applicable Norms/Standards
Use eye/face protection conforming to EN 166

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:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No data available

Applicable Norms/Standards
Use gloves tested to EN 374

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 - polymer laminate

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 organic vapours and particulates
Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards
Use a respirator conforming to EN 140 or EN 136
Use a respirator conforming to EN 140 or EN 136: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Transparent Orange
Odor	Sweet Odor
Odour threshold	*No data available.*
Melting point/freezing point	*No data available.*
Boiling point/boiling range	> 100 ºC
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Flash point	Flash point > 93 °C (200 °F)
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
pH	13.5
Kinematic Viscosity	*No data available.*
Water solubility	Complete
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	*No data available.*
Density	1.03 g/ml
Relative density	1.03 [*Ref Std:*WATER=1]
Relative Vapour Density	*No data available.*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No data available.*
Evaporation rate	*No data available.*
Percent volatile	*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
Strong oxidising agents.
Strong acids.

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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 internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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. May cause additional health effects (see below).

Skin contact
Corrosive (skin burns): Signs/symptoms may include localised 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
Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Alcohols, C7-21, ethoxylated	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Alcohols, C7-21, ethoxylated	Ingestion	Rat	LD50 > 2,000 mg/kg
Alcohols, C9-11, ethoxylated	Dermal	similar compounds	LD50 > 2,000 mg/kg
Alcohols, C9-11, ethoxylated	Inhalation-Dust/Mist	similar compoun	LC50 > 1.6 mg/l

	(4 hours)	ds	
Alcohols, C9-11, ethoxylated	Ingestion	similar compoun ds	LD50 3,488 mg/kg
tetrasodium ethylene diamine tetraacetate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.5 mg/l
tetrasodium ethylene diamine tetraacetate	Ingestion	Rat	LD50 1,658 mg/kg
POTASSIUM SILICATE	Dermal	Rabbit	LD50 > 4,640 mg/kg
POTASSIUM SILICATE	Ingestion	Rat	LD50 500 mg/kg
Oils, orange, sweet	Inhalation-Vapour (4 hours)	Mouse	LC50 > 3.14 mg/l
Oils, orange, sweet	Dermal	Rabbit	LD50 > 5,000 mg/kg
Oils, orange, sweet	Ingestion	Rat	LD50 4,400 mg/kg
(R)-p-mentha-1,8-diene	Inhalation-Vapour (4 hours)	Mouse	LC50 > 3.14 mg/l
(R)-p-mentha-1,8-diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
(R)-p-mentha-1,8-diene	Ingestion	Rat	LD50 4,400 mg/kg
potassium hydroxide	Dermal	Rabbit	LD50 > 1,260 mg/kg
potassium hydroxide	Ingestion	Rat	LD50 273 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro data	Corrosive
Alcohols, C7-21, ethoxylated	Not available	No significant irritation
Alcohols, C9-11, ethoxylated	similar compoun ds	Minimal irritation
tetrasodium ethylene diamine tetraacetate	Rabbit	No significant irritation
POTASSIUM SILICATE	Rabbit	Corrosive
Oils, orange, sweet	Rabbit	Mild irritant
(R)-p-mentha-1,8-diene	Rabbit	Mild irritant
potassium hydroxide	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	similar health hazards	Corrosive
Alcohols, C7-21, ethoxylated	Not available	Moderate irritant
Alcohols, C9-11, ethoxylated	Professio nal judgemen t	Moderate irritant
tetrasodium ethylene diamine tetraacetate	Rabbit	Corrosive
POTASSIUM SILICATE	Rabbit	Corrosive
Oils, orange, sweet	Rabbit	Mild irritant
(R)-p-mentha-1,8-diene	Rabbit	Mild irritant
potassium hydroxide	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Alcohols, C7-21, ethoxylated	Guinea pig	Not classified

Alcohols, C9-11, ethoxylated	Guinea pig	Not classified
tetrasodium ethylene diamine tetraacetate	Human and animal	Not classified
POTASSIUM SILICATE	Mouse	Not classified
Oils, orange, sweet	Mouse	Sensitising
(R)-p-mentha-1,8-diene	Mouse	Sensitising

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
Alcohols, C9-11, ethoxylated	In Vitro	Not mutagenic
tetrasodium ethylene diamine tetraacetate	In Vitro	Some positive data exist, but the data are not sufficient for classification
tetrasodium ethylene diamine tetraacetate	In vivo	Some positive data exist, but the data are not sufficient for classification
POTASSIUM SILICATE	In Vitro	Not mutagenic
POTASSIUM SILICATE	In vivo	Not mutagenic
Oils, orange, sweet	In Vitro	Not mutagenic
Oils, orange, sweet	In vivo	Not mutagenic
(R)-p-mentha-1,8-diene	In Vitro	Not mutagenic
(R)-p-mentha-1,8-diene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
tetrasodium ethylene diamine tetraacetate	Ingestion	Multiple animal species	Not carcinogenic
Oils, orange, sweet	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
(R)-p-mentha-1,8-diene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Alcohols, C9-11, ethoxylated	Dermal	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	2 generation
Alcohols, C9-11, ethoxylated	Dermal	Not classified for development	Rat	NOAEL 250 mg/kg/day	2 generation
Alcohols, C9-11, ethoxylated	Dermal	Not classified for male reproduction	Rat	NOAEL 100 mg/kg/day	2 generation
tetrasodium ethylene diamine tetraacetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	4 generation
tetrasodium ethylene diamine tetraacetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	4 generation
tetrasodium ethylene diamine tetraacetate	Ingestion	Not classified for development	Rat	LOAEL 1,000 mg/kg/day	during gestation
POTASSIUM SILICATE	Ingestion	Not classified for development	Mouse	NOAEL 200 mg/kg/day	during gestation
Oils, orange, sweet	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
Oils, orange, sweet	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
(R)-p-mentha-1,8-diene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750	premating &

				mg/kg/day	during gestation
(R)-p-mentha-1,8-diene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Overall product	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	Irritation Positive	
Alcohols, C7-21, ethoxylated	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL NA	
Alcohols, C9-11, ethoxylated	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
tetrasodium ethylene diamine tetraacetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
POTASSIUM SILICATE	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Oils, orange, sweet	Ingestion	nervous system	Not classified		NOAEL Not available	
(R)-p-mentha-1,8-diene	Ingestion	nervous system	Not classified		NOAEL Not available	
potassium hydroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Alcohols, C9-11, ethoxylated	Dermal	kidney and/or bladder | heart | hematopoietic system | liver | nervous system | respiratory system	Not classified	Rat	NOAEL 125 mg/kg/day	13 weeks
tetrasodium ethylene diamine tetraacetate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.003 mg/l	13 weeks
tetrasodium ethylene diamine tetraacetate	Inhalation	liver | heart | skin | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | eyes | kidney and/or bladder | vascular system	Not classified	Rat	NOAEL 0.015 mg/l	13 weeks
tetrasodium ethylene diamine tetraacetate	Ingestion	hematopoietic system | liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
tetrasodium ethylene diamine tetraacetate	Ingestion	heart | gastrointestinal tract | muscles | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 5,000 mg/kg/day	13 weeks
POTASSIUM 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

POTASSIUM SILICATE	Ingestion	endocrine system | blood	Not classified	Rat	NOAEL 804 mg/kg/day	3 months
POTASSIUM SILICATE	Ingestion	heart | liver	Not classified	Rat	NOAEL 1,259 mg/kg/day	8 weeks
Oils, orange, sweet	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
Oils, orange, sweet	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Oils, orange, sweet	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

Aspiration Hazard

Name	Value
Oils, orange, sweet	Aspiration hazard
(R)-p-mentha-1,8-diene	Aspiration hazard

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.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

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 #	Organism	Type	Exposure	Test endpoint	Test result
Alcohols, C9-11, ethoxylated	68439-46-3	Rainbow trout	Analogous Compound	96 hours	LC50	5 mg/l
Alcohols, C9-11, ethoxylated	68439-46-3	Green algae	Experimental	72 hours	EbC50	1.4 mg/l
Alcohols, C9-11, ethoxylated	68439-46-3	Water flea	Experimental	48 hours	EC50	2.5 mg/l

Alcohols, C9-11, ethoxylated	68439-46-3	Green algae	Analogous Compound	72 hours	ErC10	1.05 mg/l
Alcohols, C9-11, ethoxylated	68439-46-3	Water flea	Analogous Compound	21 days	NOEC	0.107 mg/l
Alcohols, C9-11, ethoxylated	68439-46-3	Activated sludge	Analogous Compound	3 hours	EC50	140 mg/l
Alcohols, C9-11, ethoxylated	68439-46-3	Wheat	Analogous Compound	19 days	EC50	>100 mg/kg (Dry Weight)
Alcohols, C7-21, ethoxylated	68991-48-0	Common Carp	Estimated	96 hours	LC50	1.2 mg/l
Alcohols, C7-21, ethoxylated	68991-48-0	Green algae	Estimated	72 hours	EC50	0.37 mg/l
Alcohols, C7-21, ethoxylated	68991-48-0	Water flea	Estimated	48 hours	EC50	0.72 mg/l
Alcohols, C7-21, ethoxylated	68991-48-0	Green algae	Estimated	72 hours	NOEC	0.09 mg/l
POTASSIUM SILICATE	1312-76-1	Bacteria	Estimated	18 hours	EC10	>3,480 mg/l
POTASSIUM SILICATE	1312-76-1	Green algae	Estimated	72 hours	EC50	>345.4 mg/l
POTASSIUM SILICATE	1312-76-1	Water flea	Estimated	48 hours	EC50	1,700 mg/l
POTASSIUM SILICATE	1312-76-1	Zebra Fish	Estimated	96 hours	LC50	1,108 mg/l
POTASSIUM SILICATE	1312-76-1	Green algae	Estimated	72 hours	NOEC	35 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Bluegill	Experimental	96 hours	LC50	401.7 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Green algae	Experimental	72 hours	ErC50	>100 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Water flea	Experimental	24 hours	EC50	610 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Water flea	Analogous Compound	21 days	NOEC	25 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Zebra Fish	Analogous Compound	35 days	NOEC	35.1 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Green algae	Experimental	72 hours	ErC10	>100 mg/l
tetrasodium ethylene diamine tetraacetate	64-02-8	Plant	Analogous Compound	21 days	NOEC	84 mg/kg (Dry Weight)
tetrasodium ethylene diamine tetraacetate	64-02-8	Redworm	Analogous Compound	14 days	LC50	156.46 mg/kg (Dry Weight)
tetrasodium ethylene diamine tetraacetate	64-02-8	Activated sludge	Experimental	30 minutes	EC10	>1,000 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Fathead minnow	Experimental	96 hours	LC50	0.702 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green algae	Experimental	72 hours	ErC50	0.32 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	48 hours	EC50	0.307 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Fathead minnow	Experimental	8 days	EC10	0.32 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green algae	Experimental	72 hours	ErC10	0.174 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	21 days	NOEC	0.153 mg/l
Oils, orange, sweet	8008-57-9	Fathead minnow	Estimated	96 hours	LC50	0.702 mg/l
Oils, orange, sweet	8008-57-9	Green algae	Estimated	72 hours	EC50	0.32 mg/l
Oils, orange, sweet	8008-57-9	Water flea	Estimated	48 hours	EC50	0.307 mg/l
Oils, orange, sweet	8008-57-9	Fathead minnow	Estimated	8 days	NOEC	0.059 mg/l
Oils, orange, sweet	8008-57-9	Green algae	Estimated	72 hours	EC10	0.174 mg/l

Oils, orange, sweet	8008-57-9	Water flea	Estimated	21 days	NOEC	0.08 mg/l
potassium hydroxide	1310-58-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Alcohols, C9-11, ethoxylated	68439-46-3	Analogous Compound Biodegradation	28 days	BOD	72 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
Alcohols, C7-21, ethoxylated	68991-48-0	Estimated Biodegradation	28 days	CO2 evolution	83 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
POTASSIUM SILICATE	1312-76-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
tetrasodium ethylene diamine tetraacetate	64-02-8	Analogous Compound Biodegradation	28 days	BOD	2 %BOD/ThOD	OECD 301D - Closed bottle test
tetrasodium ethylene diamine tetraacetate	64-02-8	Experimental Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	<10 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
tetrasodium ethylene diamine tetraacetate	64-02-8	Analogous Compound Soil Inherent Biodegradability	315 days	CO2 evolution	70.5 %CO2 evolution/THCO2 evolution	
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Biodegradation	14 days	BOD	98 %BOD/ThOD	OECD 301C - MITI test (I)
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Biodegradation	14 days	Dissolv. Organic Carbon Deplet	>93.8 %removal of DOC	OECD 303A - Simulated Aerobic
Oils, orange, sweet	8008-57-9	Estimated Biodegradation	14 days	BOD	98 %BOD/ThOD	OECD 301C - MITI test (I)
Oils, orange, sweet	8008-57-9	Estimated Photolysis		Photolytic half-life (in air)	2.5 hours (t 1/2)	
potassium hydroxide	1310-58-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Alcohols, C9-11, ethoxylated	68439-46-3	Modeled Bioconcentration		Bioaccumulation factor	31	Catalogic™
Alcohols, C9-11, ethoxylated	68439-46-3	Analogous Compound Bioconcentration		Log Kow	2.72	OECD 123 log Kow slow stir
Alcohols, C7-21, ethoxylated	68991-48-0	Estimated BCF - Fish	72 hours	Bioaccumulation factor	310	
POTASSIUM SILICATE	1312-76-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
tetrasodium ethylene diamine tetraacetate	64-02-8	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	1.8	
tetrasodium ethylene diamine tetraacetate	64-02-8	Analogous Compound Bioconcentration		Log Kow	-4.3	
(R)-p-mentha-1,8-diene	5989-27-5	Modeled Bioconcentration		Bioaccumulation factor	2100	Catalogic™
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Bioconcentration		Log Kow	4.57	
Oils, orange, sweet	8008-57-9	Estimated Bioconcentration		Bioaccumulation factor	2100	
potassium hydroxide	1310-58-3	Data not available or insufficient for	N/A	N/A	N/A	N/A

		classification				

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Alcohols, C9-11, ethoxylated	68439-46-3	Modeled Mobility in Soil	Koc	150 l/kg	Episuite™
tetrasodium ethylene diamine tetraacetate	64-02-8	Analogous Compound Mobility in Soil	Koc	3.35 l/kg	
(R)-p-mentha-1,8-diene	5989-27-5	Modeled Mobility in Soil	Koc	9,245 l/kg	Episuite™

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

12.7. Other adverse effects
No information available.

The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, 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 the manufacturer, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/CE 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)
20 01 29* Detergents containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1814	UN1814	UN1814

14.2 UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	C5	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
(R)-p-mentha-1,8-diene	5989-27-5	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status

Contact manufacturer for more information The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

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Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
(R)-p-mentha-1,8-diene	5989-27-5	10	50

Regulation (EU) No 649/2012
No chemicals listed

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was added.
Label: CLP Percent Unknown information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 03: SCL table information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Serious Eye Damage/Irritation 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.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the

product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

Meguiar's, Inc. Ireland SDSs are available at www.meguiars.co.uk