

Safety Data Sheet



according to Regulation (EC) No 1907/2006

eloma Multi-Clean spezial

Print date: 24.02.2015

Product code: 662125254

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

1.1. Product identifier

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

Use of the substance/mixture

Cleaning agent, alkaline.

Uses advised against

not known

1.3. Details of the supplier of the safety data sheet

Company name: Eloma USA
Street: 3765 Champion Blvd
Place: Winston-Salem, NC 27105
Telephone: 1-336-661-0527
Responsible Department: info@elomausa.com

1.4. Emergency telephone number: 800-424-9300 ccn :224579

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: C - Corrosive
R phrases:
Causes severe burns.

GHS classification

Hazard categories:
Substance or mixture corrosive to metals: Met. Corr. 1
Skin corrosion/irritation: Skin Corr. 1A
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.

2.2. Label elements

Hazardous components which must be listed on the label

Sodium hydroxide; caustic soda
Ethoxylated alcohols C9-C11

Signal word: Danger
Pictograms: GHS05



Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/
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 CENTER/doctor.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
215-185-5	Sodium hydroxide; caustic soda	>=5 %
1310-73-2	C - Corrosive R35	
011-002-00-6	Met. Corr. 1, Skin Corr. 1A; H290 H314	
01-2119457892-27		
221-975-0	3,5,5-trimethylhexanoic acid	<5 %
3302-10-1	Xn - Harmful, Xi - Irritant R22-36	
	Acute Tox. 4, Eye Irrit. 2; H302 H319	
	Ethoxylated alcohols C9-C11	
68439-46-3	Xn - Harmful, Xi - Irritant R22-41	<5 %
	Acute Tox. 4, Eye Dam. 1; H302 H318	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).
First aid assistant: Pay attention to self-protection!
Take off immediately all contaminated clothing.

After inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irritation of the respiratory tract seek medical advice.

After contact with skin

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water. Immediately call a POISON CENTER or doctor/physician.

After contact with 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.

After ingestion

Rinse mouth. Do NOT induce vomiting. No mouth-to-mouth or mouth-to-nose resuscitation. Use respiratory bag or oxygen resuscitation apparatus. Immediately call a POISON CENTER or doctor/physician.

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4.2. Most important symptoms and effects, both acute and delayed

refer to chapter 2 and 11.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Water spray. Foam. Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Gas/vapours, corrosive.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical resistant suit. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray/stream to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Guide people to safety.

Do not breathe vapour or spray. Avoid contact with skin, eye and clothing.

Wear personal protection equipment. (refer to chapter 8)

6.2. Environmental precautions

Do not empty into drains or the aquatic environment. Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Eliminate leaks immediately. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed containers for disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protection equipment. (refer to chapter 8)

Absorb spillage to prevent material damage.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Further information on handling

Do not breathe vapour or spray. Avoid contact with skin, eye and clothing.

Conditions to avoid: Generation/formation of aerosols

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed in a cool, well-ventilated place.
Keep locked up.
Unsuitable materials for Container: metal. (Aluminium.)

Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

Further information on storage conditions

Protect against: moisture. UV-radiation/sunlight. heat. frost.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

Additional advice on limit values

To date, no national limit values exist.

DNEL/DMEL and PNEC values
Sodium hydroxide; caustic soda (CAS-No.: 1310-73-2)
Worker, industry.
Inhalation short term (acute). DNEL = 3,1 mg/m³

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of work. Do not eat, drink, smoke or sneeze at the workplace. Take off contaminated clothing and wash before reuse.

Eye/face protection

Tightly sealed safety glasses. (DIN EN 166)

Hand protection

Pull-over gloves of rubber. (DIN EN 374)
Suitable material: NBR (Nitrile rubber). (0,4 mm, Breakthrough time ≥ 480 min)
In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.
Breakthrough times and swelling characteristics of the material must be taken into consideration. Before using check leak tightness / impermeability. In case of reutilization, clean gloves before taking off and store in well-aired place.

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Skin protection

Protective clothing. (Leachate-proof.)

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection required in case of:

Generation/formation of aerosols

Suitable respiratory protective equipment: Combination filter device (DIN EN 141).. Type AP-2/3

The filter class must be suitable for the maximum contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Environmental exposure controls

Do not allow uncontrolled leakage of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	red
Odour:	characteristic

Test method

pH-Value:	14
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Changes in the physical state

Melting point:	not determined
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Initial boiling point and boiling range:	>90 °C
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Flash point:	not determined
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Explosive properties

none/none

Lower explosion limits:	not determined
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Upper explosion limits:	not determined
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Oxidizing properties

none/none

Vapour pressure:	not determined
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Density (at 20 °C):	1,1 g/cm ³
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Water solubility:	miscible.
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Solvent content:	not determined
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9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Violent reaction with: Acid.

Reacts with : Light metal. Releases: hydrogen.

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10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Acid. Oxidizing agents, strong. metal. Aluminium. Zinc. Light metal.

10.6. Hazardous decomposition products

hydrogen.

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Gas/vapours, corrosive.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
3302-10-1	3,5,5-trimethylhexanoic acid				
	oral	LD50	1160 mg/kg	Rat.	ECHA Dossier
68439-46-3	Ethoxylated alcohols C9-C11				
	oral	ATE	500 mg/kg		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

3,5,5-trimethylhexanoic acid:

Subchronic oral toxicity (90d, Rat.) NOAEL = 5 mg/kg(bw)/day; literature information: ECHA Dossier

Subacute oral toxicity (Rat.) NOAEL = 50 mg/kg(bw)/day; literature information: ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

3,5,5-trimethylhexanoic acid:

In-vitro mutagenicity: OECD Guideline 471 (Bacterial Reverse Mutation Assay) = negative.; literature information: ECHA Dossier

OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) = negative.; literature information: ECHA Dossier

Developmental toxicity/teratogenicity (Rat.) NOAEL = 60 mg/kg(bw)/day; literature information: ECHA Dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
1310-73-2	Sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50	99 mg/l	96 h	Lepomis macrochirus	
	Acute crustacea toxicity	EC50	40 mg/l	48 h	daphnia magna	
3302-10-1	3,5,5-trimethylhexanoic acid					
	Acute fish toxicity	LC50	122 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier
	Acute algae toxicity	ErC50	81 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier
	Acute crustacea toxicity	EC50	68 mg/l	48 h	Daphnia magna	ECHA Dossier

12.2. Persistence and degradability

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
3302-10-1	3,5,5-trimethylhexanoic acid				
	OECD Guideline 301 A	96%	21	ECHA Dossier	
	Product is biodegradable.				

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1310-73-2	Sodium hydroxide; caustic soda	-3,88
3302-10-1	3,5,5-trimethylhexanoic acid	3,2

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No data available

Further information

Do not empty into drains or the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Waste disposal according to official state regulations. Consult the local waste disposal expert about waste disposal. Cleaned containers may be recycled.

Waste disposal number of waste from residues/unused products

060204 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; sodium and potassium hydroxide
Classified as hazardous waste.

Waste disposal number of used product

060204 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; sodium and potassium hydroxide
Classified as hazardous waste.

Waste disposal number of contaminated packaging

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150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Handle contaminated packaging in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C5
Limited quantity: 1 L
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Excepted quantity: E2

Inland waterways transport (ADN)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C5
Limited quantity: 1 L

Other applicable information (inland waterways transport)

Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8

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Marine pollutant: NO
Special Provisions: -
Limited quantity: 1 L
EmS: F-A, S-B

Other applicable information (marine transport)

Excepted quantity: E2

Air transport (ICAO)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE, SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Special Provisions: A3 A803
Limited quantity Passenger: 0.5 L
IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

Other applicable information (air transport)

Passenger-LQ: Y840
Excepted quantity: E2

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

irrelevant

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC): No information available.

Additional information

The preparation is dangerous in the sense of Directive 1999/45/EC.
This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].
Not subject to regulation 96/82/EC.

National regulatory information

Employment restrictions: Observe employment restrictions for young people.
Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information

Changes

Rev.1.00; 18.12.2014, Initial release

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Concerning the International Transport of Dangerous Goods by Rail)
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Full text of R phrases referred to under Sections 2 and 3

- | | |
|----|---------------------------------|
| 22 | Harmful if swallowed. |
| 35 | Causes severe burns. |
| 36 | Irritating to eyes. |
| 41 | Risk of serious damage to eyes. |

Full text of H statements referred to under Sections 2 and 3

- | | |
|------|--|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The

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information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)