*	**Energy (Miele)**			Date revised: 29.05.2015
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Energy (Miele)

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

Use of the substance/mixture

Detergent

1.3. Details of the supplier of the safety data sheet

Lavapiù S.r.l.
Strada di Circonvallazione, 27
P.I. 02636010213
39057 Appiano sulla Strada del Vino
Telephone no. +39 075 5279943
E-mail address: remo.falchi@lavapiu.com

1.4. Emergency telephone number

CAV Niguarda Tel. 0039 02/66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1A	H314
Eye Dam. 1	H318

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Danger

Hazard statements

H314	Causes severe skin burns and eye damage.

Precautionary statements

P280.2	Wear protective gloves/eye/face protection.
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 or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains	Potassium hydroxide

2.3. Other hazards

The product does not contain PBT/vPvB-substances

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Potassium hydroxide

CAS No.	1310-58-3				EINECS no.	215-181-3
Registration no.	01-2119487136-33-XXXX					
Concentration		>=	5	<	10	%

Acute Tox. 4	H302
Skin Corr. 1A	H314

Alkylpolyglucoside

CAS No.	110615-47-9					
Registration no.	01-2119489418-23-XXXX					
Concentration		>=	1	<	10	%

Eye Dam. 1	H318
Skin Irrit. 2	H315

Isotridecanol, ethoxylated

CAS No.	69011-36-5				EINECS no.	500-241-6
Registration no.	01-2119976362-32-XXXX					
Concentration		>=	1	<	10	%

Acute Tox. 4	H302
Eye Dam. 1	H318

sodium cumenesulphonate

CAS No.	28348-53-0				EINECS no.	248-983-7
Concentration		>=	1	<	10	%

Eye Irrit. 2	H319
STOT SE 3	H335

Alcohols, C12-15-branched and linear, ethoxylated, propoxylated (> 2.5 EO/PO)

CAS No.	120313-48-6					
Concentration		>=	1	<	10	%

Skin Irrit. 2	H315
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

2-phosphonobutane-1,2,4-tricarboxylic acid

CAS No.	37971-36-1				EINECS no.	253-733-5
Registration no.	01-2119436643-39-XXXX					
Concentration		>=	1	<	10	%

Eye Irrit. 2	H319
Met. Corr. 1	H290

2-(2-Butoxyethoxy)ethanol

CAS No.	112-34-5				EINECS no.	203-961-6
Registration no.	01-2119475104-44-XXXX					
Concentration		>=	1	<	10	%

Eye Irrit. 2	H319

Other information

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Ensure supply of fresh air. Summon a doctor immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution. Seek medical advice immediately.

After ingestion

Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet.

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

There is no further relevant information available

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

There is no further relevant information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry powder, Water spray jet, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible. If a fire breaks out nearby, pressure build-up and danger of bursting are possible.

5.3. Advice for firefighters

Use self-contained breathing apparatus.
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep people away and stay on the upwind side. Use breathing apparatus if exposed to vapours/dust/aerosol. Use personal protective clothing.

6.2. Environmental precautions

Do not allow to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).
Containers in danger should be cooled with water.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in the original container. Provide alkali-resistant floor. Store product in closed containers. Do not store together with: Acids, Aluminium

Storage class according to TRGS 510	Caustic substances

Keep container tightly closed.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

2-(2-Butoxyethoxy)ethanol

List	EH40			
Type	WEL			
Value	67.5	mg/m³	10	ppm(V)
Short term exposure limit	101.2	mg/m³	15	ppm(V)

Maximum limit value; Skin resorption / sensibilisation: Pregnancy group: Status: 2011

Potassium hydroxide

List	EH40	
Type	WEL	
Short term exposure limit	2	mg/m³

Maximum limit value; Skin resorption / sensibilisation: Pregnancy group: Status: 2011

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, Filter B

Hand protection

Chemical resistant gloves

Appropriate Material	nitrile		
Material thickness	>=	0,7	mm
Breakthrough time		480	min

Eye protection

Tightly fitting safety glasses

Body protection

Alkali-resistant protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid				
Colour	yellow				
Odour	Product specific				
pH value					
Value		11,50	to	12,50	
Concentration/H2O		1	%		
Flash point					
Value	>	100			°C
Density					
Value	appr.	1,065			kg/l

Solubility in water

Remarks	miscible

Viscosity

Value	appr.	11	to	14	s

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrodes aluminium.

10.2. Chemical stability

The product is stable.

10.3. Possibility of hazardous reactions

Strong exothermic reaction with acids.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Strong exothermic reaction with acids. Reactions with metals, with evolution of hydrogen.

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

ATE	6.061	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

Acute dermal toxicity

No toxicological data are available.

Acute inhalational toxicity

No toxicological data are available.

Skin corrosion/irritation

Corrosive action on the skin and mucous membrane.

Serious eye damage/irritation

evaluation	corrosive

Sensitization

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific Target Organ Toxicity (STOT)

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

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Fish toxicity

For this subsection there is no ecotoxicological data available on the product as such.

Daphnia toxicity

For this subsection there is no ecotoxicological data available on the product as such.

Algae toxicity

For this subsection there is no ecotoxicological data available on the product as such.

Bacteria toxicity

For this subsection there is no ecotoxicological data available on the product as such.

12.2. Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.Do not discharge product unmonitored into the environment.

12.3. Bioaccumulative potential

For this subsection there is no ecotoxicological data available on the product as such.

12.4. Mobility in soil

For this subsection there is no ecotoxicological data available on the product as such.

12.5. Results of PBT and vPvB assessment

The product does not contain PBT/vPvB-substances

12.6. Other adverse effects

For this subsection there is no ecotoxicological data available on the product as such.

Behaviour in sewers [waste treatment plants]

The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

Land transport ADR/RID

14.1. UN number

UN 3266

14.2. UN proper shipping name

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)

14.3. Transport hazard class(es)

Class	8

14.4. Packing group

Packing group	II
Tunnel restriction code	E

Marine transport IMDG/GGVSee

14.1. UN number

UN 3266

14.2. UN proper shipping name

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)

14.3. Transport hazard class(es)

Class	8

14.4. Packing group

Packing group	II
EmS	F-A, S-B

SECTION 15: Regulatory information

Ingredients (Regulation (EC) No 648/2004)

5 % or over but less than 15 %:

non-ionic surfactants

less than 5 %:

phosphonates

Further ingredients

optical brighteners, 2-(4-tert-butylbenzyl)propionaldehyde, Citronellol, coumarin, geraniol, Hexyl Cinnamal, linalool

VOC

VOC (EU)	0	%

Other information

The product does not contain substances of very high concern (SVHC).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Irrit. 2	Skin irritation, Category 2
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Abbreviations

PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very persistent and very bioaccumulative

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationshi