11/2017

Mod: OVEN-CL

Production code: PN35546 (CLEAN OVEN)

Diamond
Cleaning products

Safety Data Sheet
CLEAN OVEN

Safety Data Sheet dated 5/4/2017, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: CLEAN OVEN

Trade code: MD35546

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

Recommended use;

Detergente per forni autopulenti di autotreni ed autoveicoli in impianti automatici

Uses advised against:

Uses other than those recomended. Do not use with other product.

1.3. Details of the supplier of the safety data sheet

Company:

M.D. INTERNATIONAL s.r.l.

Via Metauro, 31/A

61033 Fermignano (PU)

Tel. 0722331112

Fax 0722332280

Competent person responsible for the safety data sheet:

simona@midor.it

1.4. Emergency telephone number

Tel. 0722331112

Fax 0722332280

Antipoison Center – Az.Osp.Papa Giovanni XXII - Bergamo - 800 883-300

Antipoison Center – Centro Nazionale di Informazione Tossicologica-PAVIA-0382 24444

Antipoison Center - Az. Osp. "Careggi" U.O. Tossicologia Medica - Firenze - 055 7947819

Antipoison Center – Osp. Pediatrico Bambino Gesù - Roma - 06 49978000

Antipoison Center – Policlinico "Umberto I"- Roma - 06 49918000

Antipoison Center – Policlinico "A. Gemelli" - Roma - 06 3054343

Antipoison Center – Az. Osp. "A. Cardarelli" - Napoli - 081 7472870

Antipoison Center – Osp. Pediatrico Bambino Gesù - Roma - 06 49978000

Antipoison Center – Osp. Niguarda Ca' Granda -Milano - 02 66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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/...
Special Provisions:
None
Contains
ACIDO ETIDRONICO
sodium hydroxide; caustic soda
COMPOSTO QUATERNARIO: May produce an allergic reaction.
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.
3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 7% - < 10%	sodium hydroxide; caustic soda	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5	2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318
>= 3% - < 5%	2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve	Index number: 603-014-00-0 CAS: 111-76-2 EC: 203-905-0	3.3/2 Eye Irrit. 2 H319 3.2/2 Skin Irrit. 2 H315 3.1/4/Oral Acute Tox. 4 H302 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332
>= 3% - < 5%	DPM-DIPROP.GLIC.M /ETERE	CAS: 34590-94-8 EC: 252-104-2	Substance with a Union workplace exposure limit.
>= 3% - < 5%	ACIDO ETIDRONICO	CAS: 2809-21-4 EC: 220-552-8	2.16/1 Met. Corr. 1 H290 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318
>= 1% - < 3%	POTASSIUM COCOATE	CAS: 61789-30-8 EC: 263-049-9	3.2/2 Skin Irrit. 2 H315
>= 0.25% - < 0.5%	COMPOSTO QUATERNARIO	EC: 630-545-5	3.3/1 Eye Dam. 1 H318 3.4.2/1 Skin Sens. 1 H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediatley and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO_2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide; caustic soda - CAS: 1310-73-2
ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr
2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
EU - TWA(8h): 98 mg/m3, 20 ppm - STEL: 246 mg/m3, 50 ppm - Notes: Skin
ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - Eye and URT irr
DPM-DIPROP.GLIC.M/ETERE - CAS: 34590-94-8
EU - TWA(8h): 308 mg/m3, 50 ppm - Notes: Skin
ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: Skin - Eye and URT irr, CNS impair

DNEL Exposure Limit Values

sodium hydroxide; caustic soda - CAS: 1310-73-2
Consumer: 1 mg/kg - Exposure: Human Inhalation - Frequency: 7
Worker Industry: 1 mg/kg - Exposure: Human Inhalation - Frequency: 7
2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
Consumer: 123 4 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer: 49 4 - Exposure: Human Inhalation - Frequency: 7
Consumer: 38 5 - Exposure: Human Dermal - Frequency: 7
Consumer: 3.2 5 - Exposure: Human Oral - Frequency: 7
Worker Professional: 20 mg/kg - Exposure: Human Inhalation - Frequency: 7
ACIDO ETIDRONICO - CAS: 2809-21-4
Consumer: 6.5 mg/kg - Exposure: Human Oral - Frequency: Short Term (acute)
Consumer: 6.5 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated)

PNEC Exposure Limit Values

2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
Target: Fresh Water - Value: 8.8 mg/l
Target: Marine water - Value: 0.88 mg/l
Target: Freshwater sediments - Value: 34.6 mg/kg
Target: Marine water sediments - Value: 3.46 mg/kg
Target: Soil (agricultural) - Value: 3.13 mg/kg
ACIDO ETIDRONICO - CAS: 2809-21-4
Target: Fresh Water - Value: 0.13 mg/l
Target: Marine water - Value: 0.014 mg/l

Target: Freshwater sediments - Value: 56 mg/kg
Target: Marine water sediments - Value: 5.9 mg/kg
Target: Soil (agricultural) - Value: 96 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	LIQUID, ICOLORE	--	--
Odour:	CARATERISTICO	--	--
Odour threshold:	N.A.	--	--
pH:	13	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	>100°C	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1,2+/-0,02 g/cm3	--	--
Solubility in water:	COMPLETA	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--

Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
None in particular.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:
sodium hydroxide; caustic soda - CAS: 1310-73-2
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 340 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit = 1350 mg/kg
Test: LC50 - Route: Inhalation - Species: Rabbit = 1350 mg/kg - Duration: 4H
2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat = 2-20 mg/l - Duration: 4H
Test: LD50 - Route: Oral - Species: Rat = 200-2000 mg/kg
Test: LD50 - Route: Skin - Species: Rat = 400-2000 mg/kg
DPM-DIPROP.GLIC.M/ETERE - CAS: 34590-94-8
h) STOT-single exposure:
Test: LD50 - Route: Skin - Species: Rabbit = 9500 mg/kg
i) STOT-repeated exposure:
Test: LD50 - Route: Oral - Species: Rat = 5660 mg/kg
ACIDO ETIDRONICO - CAS: 2809-21-4
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Mouse = 1100 mg/kg
Test: LD50 - Route: Oral - Species: Rat = 1580 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 7940 mg/l

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
sodium hydroxide; caustic soda - CAS: 1310-73-2
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 45 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 40 mg/l - Duration h: 48
Endpoint: EC50 - Species: Daphnia = 40 mg/l - Duration h: 72
2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 24
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96
b) Aquatic chronic toxicity:
Endpoint: EC50 - Species: Algae > 100 mg/l
DPM-DIPROP.GLIC.M/ETERE - CAS: 34590-94-8
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae > 969 mg/l - Duration h: 1
Endpoint: LC50 - Species: Fish > 10000 mg/l - Duration h: 1
Endpoint: LC50 - Species: Daphnia = 1919 mg/l - Duration h: 1
ACIDO ETIDRONICO - CAS: 2809-21-4
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 368 mg/l - Duration h: 96
Endpoint: EC50 - Species: Fish > 100 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 527 mg/l - Duration h: 48
Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 7.2 mg/l - Duration h: 96
Endpoint: EC50 - Species: Algae = 153 mg/l - Duration h: 72

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number
ADR-UN number: 1824
14.2. UN proper shipping name
14.3. Transport hazard class(es)
ADR-Class: 8
14.4. Packing group
ADR-Packing Group: III
14.5. Environmental hazards
14.6. Special precautions for user
ADR-Tunnel Restriction Code: E
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
Restrictions related to the product:
Restriction 3
Restrictions related to the substances contained:
No restriction.

Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
NA

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H302 Harmful if swallowed.

H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1A, H314	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.

KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.