

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

1.1. Product identifier

Product form : Mixture
Product name : MIDA FLOW 144 ZC
Type of product : Detergent,Cleaning agent

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use
Use of the substance/mixture : Chlorinate alkaline detergent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Christeyns s.r.o.
Vítovská 453/7
742 35 Odry - Czech Rep
T +420 556 731 111
petra.vyskocilova@christeyns.cz - www.christeyns.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Met. Corr. 1 H290
Skin Corr. 1A H314
Aquatic Acute 1 H400
Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05 GHS09

CLP Signal word : Danger
Hazardous ingredients : Potassium hydroxide
Hazard statements (CLP) : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements (CLP)

: P234 - Keep only in original packaging.
P260 - Do not breathe vapours.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective gloves.
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 or shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P390 - Absorb spillage to prevent material damage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements

: EUH031 - Contact with acids liberates toxic gas.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium hydroxide	(CAS-no) 1310-58-3 (Einecs nr) 215-181-3 (EG annex nr) 019-002-00-8 (REACH-no) 01-2119487136-33	5 – 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Met. Corr. 1, H290
Sodium disilicate	(CAS-no) 1344-09-8 (Einecs nr) 215-687-4 (EG annex nr) 215-687-4 (REACH-no) 01-2119448725-31	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Sodium hypochlorite	(CAS-no) 7681-52-9 (Einecs nr) 231-668-3 (EG annex nr) 017-011-00-1 (REACH-no) 01-2119488154-34	5 – 10	Met. Corr. 1, H290 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10)
Amines, C12-14, alkyldimethyl, N-oxides	(CAS-no) 308062-28-4 (Einecs nr) 931-292-6 (REACH-no) 01-2119490061-47	3 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Sodium hydroxide	(CAS-no) 1310-73-2 (Einecs nr) 215-185-5 (EG annex nr) 011-002-00-6 (REACH-no) 01-2119457892-27	1 – 3	Skin Corr. 1A, H314 Eye Dam. 1, H318 Met. Corr. 1, H290

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Potassium hydroxide	(CAS-no) 1310-58-3 (Einecs nr) 215-181-3 (EG annex nr) 019-002-00-8 (REACH-no) 01-2119487136-33	(0.5 ≤C < 2) Eye Irrit. 2, H319 (0.5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C < 100) Skin Corr. 1A, H314
Sodium hypochlorite	(CAS-no) 7681-52-9 (Einecs nr) 231-668-3 (EG annex nr) 017-011-00-1 (REACH-no) 01-2119488154-34	(5 ≤C < 100) EUH031
Sodium hydroxide	(CAS-no) 1310-73-2 (Einecs nr) 215-185-5 (EG annex nr) 011-002-00-6 (REACH-no) 01-2119457892-27	(0.5 ≤C < 2) Eye Irrit. 2, H319 (0.5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C < 100) Skin Corr. 1A, H314

Full text of H-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: In case of doubt or persistent symptoms, consult always a physician. For symptom description, see item 11.
Inhalation	: Fresh air, rest.
Skin contact	: Take off immediately all contaminated clothing. Rinse immediately and plentifully with water and seek medical advice.
Eye contact	: Wash with plenty of water (during 20 minutes minimum) with eyes wide open, keeping contact lenses and immediately take medical advice.
Ingestion	: Rinse mouth, do not vomit, keep quiet, and go immediately to hospital or to a doctor.

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

Acute effects inhalation	: Irritating to the respiratory system, may cause throat pain and cough.
Acute effects skin	: Causes severe burns.
Acute effects eyes	: Serious damage to eyes.
Acute effects oral route	: Burns of the upper digestive and respiratory tracts.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing agents can be used.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Stop leak without risks if possible.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spilled material with sand or earth. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Never mix with other materials. Never return unused material to original container.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container. Keep container tightly closed in a cool place.

Storage temperature : ≤ 30 °C

Material(s) to avoid : None known.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium hydroxide (1310-58-3)	
Ireland - Occupational Exposure Limits	
Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide
WEL STEL (mg/m ³)	2 mg/m ³

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Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
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Sodium hydroxide (1310-73-2)

Ireland - Occupational Exposure Limits

Regulatory reference	Chemical Agents Code of Practice 2020
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United Kingdom - Occupational Exposure Limits

Local name	Sodium hydroxide
WEL STEL (mg/m ³)	2 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Hand protection:

Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

Eye protection:

Safety glasses with side-shields (EN 166)

Protective equipment:

Wear suitable protective clothing minimum (EN 13034) Type 6 equipment

Respiratory protection:

Not necessary with sufficient ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: chlorine.
Odour threshold	: No data available
pH	: 12,5 ± 0,5 (1%)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point/range	: No data available
Freezing point	: No data available
Boiling point/Boiling range	: No data available
Flash point	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 1.186 g/ml
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

All heat sources, including direct sunlight.

10.5. Incompatible materials

Never mix with other materials.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Potassium hydroxide (1310-58-3)	
LD50 oral rat	333 mg/kg
ATE CLP (oral)	333 mg/kg bodyweight

Sodium hypochlorite (7681-52-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Amines, C12-14, alkyldimethyl, N-oxides (308062-28-4)	
LD50 oral rat	1064 mg/kg
ATE CLP (oral)	1064 mg/kg bodyweight

Sodium hydroxide (1310-73-2)	
ATE CLP (oral)	2000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns. pH: 12,5 ± 0,5 (1%)
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 12,5 ± 0,5 (1%)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

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Potassium hydroxide (1310-58-3)	
LC50 fish 1	80 mg/l
EC50 Daphnia 1	30 – 1000 mg/l (OECD 202)

Sodium hypochlorite (7681-52-9)	
LC50 fish 1	0.06 mg/l (fresh water)
LC50 fish 2	0.032 mg/l (marine water)
EC50 Daphnia 1	0.141 mg/l (Daphnia magna - fresh water)
EC50 other aquatic organisms 1	0.026 mg/l (Crassostrea virginica - marine water)

Amines, C12-14, alkyldimethyl, N-oxides (308062-28-4)	
LC50 fish 1	2.67 mg/l
EC50 Daphnia 1	3.1 mg/l
ErC50 (algae)	0.143 mg/l
NOEC chronic algae	0.067 mg/l

Sodium hydroxide (1310-73-2)	
LC50 fish 1	> 35 mg/l
EC50 Daphnia 1	40.4 mg/l (Ceriodaphnia)
EC50 other aquatic organisms 1	> 33 mg/l waterflea

12.2. Persistence and degradability

MIDA FLOW 144 ZC	
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. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Sodium hypochlorite (7681-52-9)	
Persistence and degradability	Strong oxidizing agent. It will react with organic substances present in soil and sediments and degrades rapidly to chloride. Sodium hypochlorite is substantially removed in biological treatment processes.

Sodium hydroxide (1310-73-2)	
Persistence and degradability	Not applicable.

12.3. Bioaccumulative potential

Potassium hydroxide (1310-58-3)	
Log Pow	0.75

Sodium hypochlorite (7681-52-9)	
Bioaccumulative potential	Bioaccumulation unlikely.

Sodium hydroxide (1310-73-2)	
Log Pow	-3.88
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Other adverse effects

No additional information available




SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste / unused products : Collect all waste in suitable and labelled containers and dispose according to local legislation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
UN 3266	UN 3266	UN 3266
14.2. UN proper shipping name		
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	Corrosive liquid, basic, inorganic, n.o.s.
Transport document description		
UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide ; Sodium hypochlorite), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide ; Sodium hypochlorite), 8, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3266 Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide ; Sodium hypochlorite), 8, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

Overland transport

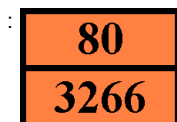
Classification code (ADR) : C5
Special provisions (ADR) : 274
Limited quantities (ADR) : 1I
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T11
Portable tank and bulk container special provisions (ADR) : TP2, TP27
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80

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Orange plates



Tunnel code : E
EAC code : 2X
APP code : B

Transport by sea

Special provisions (IMDG) : 274
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02

Air transport

PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Detergent Regulation (648/2004/EC): Labelling of contents:

Component	%
chlorine-based bleaching agents	5-15%
non-ionic surfactants, polycarboxylates, phosphonates	<5%
METHYLCHLOROISOTHIAZOLINONE (AND) METHYLISOTHIAZOLINONE	

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information

: It is recommended to pass the information of this safety data sheet in an appropriate form to the users. Such information is actually the best of our knowledge and believes accurate as reliable. This information relates to the specific material designated and may not be valid in combination with other products. This safety data sheet is in compliance with 1907/2006/EEC. It is user's liabilities to take all necessary measures to meet local required laws and regulations. The producer is not responsible for any damage and loss due to the use of information mentioned in this safety data sheet.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
EUH031	

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Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
H412	Harmful to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas

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

Met. Corr. 1	H290	Calculation method
Skin Corr. 1A	H314	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 3	H412	Calculation method

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.