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

1.1. Product identifier

Product form	: Mixture
Product name	: MIDA FLOW 215 MG
Product code	: IT00126
Type of product	: Detergent

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only
Use of the substance/mixture	: Descaling product

1.2.2. Uses advised against

Restrictions on use	: The product should not be used for purposes other than those shown above without first referring to the supplier and obtaining written handling instructions

1.3. Details of the supplier of the safety data sheet

Manufacturer

Christeyns Italia S.r.l.
Via Aldo Moro 30
IT 20042 PESSANO CON BORNAGO (MI)
Italy
T +39 (02) 99765220, F +39 (02) 99765249
info.pfhitalia@christeyns.com, www.christeyns.com

Distributor

Casoria Company Ltd. Ltd
1 Farnham Street
IE H12 A9K0 Cavan, Co. Cavan
Ireland
T 00353 49 4361869, F 00353 49 436 1869
sds@casoria.ie, www.casoria.ie

Distributor

Christeyns UK Ltd.
Rutland Street
GB Bradford BD4 7EA
United Kingdom
T +44 (0)1274 39 32 86, F +44 (0)1274 30 91 43
info@christeyns.be, www.christeyns.com

Distributor

Christeyns Technologies Ltd.
Mazars, Block 3, Harcout Centre, Harcourt Road
IE 2 Dublin
Ireland
T +353 1 8146022

Distributor

Christeyns Food Hygiene Ltd. Ltd
2, Cameron Court, Winwick Quay
GB WA2 8RE Warrington, Cheshire
United Kingdom
T +44 (0)1925 23 46 96
UK-foodinfo@christeyns.com, www.christeyns.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	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	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07

CLP Signal word : Danger

Contains : citric acid; Glycolic acid; Methanesulphonic acid

Hazard statements (CLP) : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective clothing, eye protection, face protection, protective gloves.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor, a POISON CENTER.
P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor, a POISON CENTER.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor, a POISON CENTER.
P312 - Call a POISON CENTRE or doctor if you feel unwell.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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]
Methanesulphonic acid	CAS-no: 75-75-2 Einecs nr: 200-898-6 EG annex nr: 607-145-00-4 REACH-no: 01-2119491166-34	10 – 30	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=649 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
citric acid substance with national workplace exposure limit(s) (CZ, DE, CH)	CAS-no: 77-92-9 Einecs nr: 201-069-1 EG annex nr: 607-750-00-3 REACH-no: 01-2119457026-42	5 – 10	Eye Irrit. 2, H319 STOT SE 3, H335
Glycolic acid	CAS-no: 79-14-1 Einecs nr: 201-180-5 REACH-no: 01-2119485579-17	3 – 5	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=3.6 mg/l/4h) Skin Corr. 1B, H314 Eye Dam. 1, H318 EUH071

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Call a physician immediately.

Inhalation : Call a poison center or a doctor if you feel unwell. Remove person to fresh air and keep comfortable for breathing.

Skin contact : Take off immediately all contaminated clothing and wash it before reuse. Call a physician immediately. Rinse skin with water/shower.

Eye contact : Call a physician immediately. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion : Do NOT induce vomiting. Rinse mouth. Call a physician immediately.

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

Acute effects skin : Burns.

Acute effects eyes : Causes serious eye burns.

Acute effects oral route : Burns.

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 : All extinguishing agents can be used. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe Mist, Spray, gas, vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use self-contained breathing apparatus and chemically protective clothing. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Shovel or sweep up and put in a closed container for disposal.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Never mix with other materials. Never return unused material to original container. Avoid contact with skin and eyes. Do not breathe Mist, Spray, Aerosol, gas, vapours. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container. Store tightly closed in a dry and cool place. Store in corrosive resistant container with a resistant inner liner.

Incompatible products : Strong bases.

Incompatible materials : Metals.

Maximum storage period : ≤ 3 year

Storage temperature : ≤ 35 (≥ 0) °C

Material(s) to avoid : Bases.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures
No additional information available

8.1.3. Air contaminants formed
No additional information available

8.1.4. DNEL and PNEC
No additional information available

8.1.5. Control banding
No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:

Wear a face shield. Face shield. Safety glasses

8.2.2.2. Skin protection

Protective equipment:

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

Hand protection:

Wear protective gloves. Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards
No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point/range	: Not applicable
Freezing point	: ≤ 0 °C
Boiling point/Boiling range	: ≥ 100 °C
Flammability	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 60 °C
Autoignition temperature	: Not available

Decomposition temperature	: Not available
pH	: 0.5 ± 0,5
pH solution concentration	: 100 %
Viscosity, kinematic	: ≈ 5 mm²/s
Viscosity, dynamic	: ≈ 5 mPa·s
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not determined as it is not relevant for the characterization of the product
Vapour pressure at 50°C	: Not available
Density	: 1.136 g/cm³ ± 0,05 at 20 °C
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Contact with alkaline products gives exothermic reaction.

10.5. Incompatible materials

Never mix with other materials. Bases. metals.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

citric acid (77-92-9)	
LD50 oral rat	3000 mg/kg Source: OECD Screening Information Data Set
LD50 dermal	> 2000 mg/kg bodyweight

Glycolic acid (79-14-1)	
LD50 oral rat	2040 mg/kg bodyweight Animal: rat, Guideline: EPA OPP 81-1 (Acute Oral Toxicity), 95% CL: 1443 - 2469
LC50 Inhalation - Rat (Dust/Mist)	3.6 mg/l/4h

Methanesulphonic acid (75-75-2)	
LD50 oral rat	649 mg/kg
LD50 dermal	> 1000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns. pH: 0.5 ± 0,5
Serious eye damage/irritation	: Causes serious eye damage. pH: 0.5 ± 0,5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

citric acid (77-92-9)	
STOT-single exposure	May cause respiratory irritation.

Methanesulphonic acid (75-75-2)	
NOAEL (oral, rat)	≥ 1000 mg/kg bodyweight
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

citric acid (77-92-9)	
LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat

Glycolic acid (79-14-1)	
LOAEL (oral, rat, 90 days)	300 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day (OECD 408)

Aspiration hazard : Not classified

MIDA FLOW 215 MG	
Viscosity, kinematic	≈ 5 mm²/s

Glycolic acid (79-14-1)	
Viscosity, kinematic	6.149 mm²/s

11.2. Information on other hazards
No additional information available

SECTION 12: Ecological information
12.1. Toxicity
Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

citric acid (77-92-9)	
LC50 - Fish [1]	48 mg/l Source: ECOTOX
EC50 - Other aquatic organisms [1]	85 mg/l waterflea

Glycolic acid (79-14-1)	
LC50 - Fish [1]	164 mg/l (Pimephales promelas)
EC50 - Crustacea [1]	141 mg/l (Daphnia magna)
ErC50 algae	44 mg/l (Pseudokirchneriella subcapitata)
NOEC chronic algae	20 mg/l (NOEC / 72 h / Pseudokirchneriella subcapitata - OECD 201)

12.2. Persistence and degradability

MIDA FLOW 215 MG	
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.

citric acid (77-92-9)	
Persistence and degradability	Rapidly degradable

Glycolic acid (79-14-1)	
Persistence and degradability	Readily biodegradable.

Methanesulphonic acid (75-75-2)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

citric acid (77-92-9)	
Log Pow	-1.7 Source: ICSC

Glycolic acid (79-14-1)	
Bioaccumulative potential	Bioaccumulation unlikely.

Methanesulphonic acid (75-75-2)	
Log Pow	-2.38
Bioaccumulative potential	No bioaccumulation potential.

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Endocrine disrupting properties
No additional information available

12.7. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Completely empty the packaging prior to decontamination.

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

HP Code : HP8 - "Corrosive:" waste which on application can cause skin corrosion.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3265	UN 3265	UN 3265
14.2. UN proper shipping name		
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Methanesulphonic acid ; Glycolic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Methanesulphonic acid ; Glycolic acid)	Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid ; Glycolic acid)
Transport document description		
UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Methanesulphonic acid ; Glycolic acid), 8, III, (E)	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Methanesulphonic acid ; Glycolic acid), 8, III	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid ; Glycolic acid), 8, III
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C3
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5l
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	: 
Tunnel code	: E
EAC code	: 2X
APP code	: B

Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03

Air transport

PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A803

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Detergent Regulation (648/2004)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Supersedes	Modified	
	Review date	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

Abbreviations and acronyms:	
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Other information : It is recommended to pass the information from this safety data sheet in an appropriate form to the users. The information is currently to the best of our knowledge and believed to be accurate ana reliable. This information relates to the specifically named product and may not be valid in combination with other products.
This safety data sheet is in compliance with 1907/2006/EEC. It is the responsibility of the user 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 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH071	Corrosive to the respiratory tract.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
STOT SE 3	H335	Calculation method

Safety Data Sheet (SDS), EU

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.