

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 15-Mar-2017

Revision date 06-Nov-2024

Revision Number 2.01

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

1.1. Product identifier

Product Code(s) 50801
Safety data sheet number 50801
Product Name CAFLON MGDA 40
Synonyms MGDA NA3 Liquid
Pure substance/mixture Mixture

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

Recommended use Chemical intermediate

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified

Corrosive to metals	Category 1 - (H290)
----------------------------	---------------------

2.2. Label elements

Not classified

**Signal word**

Warning

Hazard statements

Not classified

H290 - May be corrosive to metals

Precautionary statements

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Causes mild skin irritation.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT 164462-16-2	40 - 50%	423-270-5	-	Met. Corr. 1 (H290)	-	-	-
SODIUM HYDROXIDE 1310-73-2	0 - 10%	215-185-5 (011-002-00-6)	UK-01-6126796028-6-XXXX	Skin Corr. 1A (H314) Met. Corr. 1 (H290) Eye Dam. 1 (H318)	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	-	-

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

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air. Rinse mouth thoroughly with water. IF exposed or concerned: Get medical advice/attention.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Move victim to fresh air. Clean mouth with water and drink afterwards plenty of water. (Get medical attention immediately if symptoms occur).

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

Symptoms	Prolonged contact may cause redness and irritation.
Eyes	May cause temporary eye irritation.

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

Note to doctors	Treat symptomatically.
-----------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Nitrogen oxides (NOx).
-------------------------------	------------------------

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
--	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with eyes, skin and clothing. Provide adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Flush area with flooding quantities of water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Avoid contact with eyes, skin and clothing. Ensure adequate ventilation.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep at a temperature not exceeding 50 °C.

7.3. Specific end use(s)**Specific use(s)**

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	United Kingdom
SODIUM HYDROXIDE 1310-73-2	STEL: 2 mg/m ³

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT 164462-16-2		170 mg/kg bw/day [4] [6] 2000 mg/kg bw/day [4] [7] 2000 mg/cm ² [5] [7]	40 mg/m ³ [4] [6] 40 mg/m ³ [4] [7] 4 mg/m ³ [5] [6] 40 mg/m ³ [5] [7]
SODIUM HYDROXIDE 1310-73-2			1 mg/m ³ [5] [6]

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT 164462-16-2	17 mg/kg bw/day [4] [6] 85 mg/kg bw/day [4] [7]	400 mg/kg bw/day [4] [6] 400 mg/kg bw/day [4] [7] 400 mg/cm ² [5] [7]	20 mg/m ³ [4] [6] 20 mg/m ³ [4] [7] 2 mg/m ³ [5] [6] 20 mg/m ³ [5] [7]
SODIUM HYDROXIDE 1310-73-2			1 mg/m ³ [5] [6]

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT 164462-16-2				2.5 mg/kg soil dw	

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Protective gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Nitrile rubber	0.4 mm	8 hours
Long term (repeated)	PVC	0.7 mm	8 hours
Long term (repeated)	Chloroprene rubber (CR)	0.5 mm	8 hours

Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid	
Appearance	Liquid	
Colour	Yellowish	
Odour	Characteristic.	
Odour threshold	No information available	
Property	Values	Remarks • Method
Melting point / freezing point	< -20 °C	< -20°C.
Initial boiling point and boiling range	100 °C	100°C.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available.
Autoignition temperature	> 200 °C	>200°C.
Decomposition temperature		No information available.
pH		pH (diluted solution): 10.5 - 11.5 @ 1%.
pH (as aqueous solution)	10.5 - 11.5	solution (1.0 %).
Kinematic viscosity		No information available.
Dynamic viscosity	25 mPa s @ 23°C	@ 23 °C.
Water solubility	Miscible with water	
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure	23.4 hPa @ 20°C	@ 20 °C.
Relative density	1.29 - 1.33 @ 20°C	20 °C.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Corrosive to metal.
-------------------	---------------------

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Aluminium. Metals.

10.6. Hazardous decomposition products

Hazardous decomposition products Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation May cause irritation.

Eye contact May cause irritation.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.
May cause slight irritation.

Ingestion Gastrointestinal discomfort.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
SODIUM HYDROXIDE	> 2000 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 435: In Vitro Membrane Barrier Test Method for Skin Corrosion	in vitro				Corrosive Causes severe burns Symptoms may include pain, severe local redness and tissue damage.

Serious eye damage/eye irritation No information available.

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			Corrosive

Respiratory or skin sensitisation No information available.

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Exposure route	Results
	Human evidence		Not a skin sensitiser

Germ cell mutagenicity No information available.

Component Information

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Results
	in vitro	Negative

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Corrosive Material is not classified as a respiratory irritant; however, Upper respiratory tract irritation or corrosivity may be expected.

STOT - repeated exposure No information available.

Component Information

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, repeated exposures are not anticipated to cause significant adverse effects

Aspiration hazard No information available.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

SODIUM HYDROXIDE (1310-73-2)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow trout)	LC50	45.4 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Invertebrate	EC50	40.4 mg/L	48 hours	
	Pseudomonas putida	EC0	>100 mg/L	30 minutes	

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT	-	LC50: >110mg/L (96h, Danio rerio)	-	-

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

SODIUM HYDROXIDE (1310-73-2)

Method	Exposure time	Value	Results
			Inorganic.

12.3. Bioaccumulative potential

Bioaccumulation MATERIAL DOES NOT BIOACCUMULATE.

Chemical name	Partition coefficient
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT	-4

12.4. Mobility in soil

Mobility in soil Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT	The substance is not PBT / vPvB
SODIUM HYDROXIDE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	UN3267
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT, SODIUM HYDROXIDE)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	A3, A803
ERG Code	8L

IMDG

14.1 UN number or ID number	UN3267
UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT, SODIUM HYDROXIDE)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	223, 274
EmS-No	F-A, S-B
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN3267
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT, SODIUM HYDROXIDE)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274
Classification code	C7

ADR

14.1 UN number or ID number	UN3267
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE N,N,-BIS(CARBOXYMETHYL)-TRISODIUM SALT, SODIUM HYDROXIDE)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274
Classification code	C7
Tunnel restriction code	(E)

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
SODIUM HYDROXIDE - 1310-73-2	75	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

Chemical name	Poisons and Explosive Precursors
SODIUM HYDROXIDE	Poison, Reportable 12 % of total caustic alkalinity

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status
 AIIC Contact supplier for inventory compliance status
 NZIoC Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H314 - Causes severe skin burns and eye damage

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AELG(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Jitendra Panchal

Supersedes date 15-Mar-2017

Revision date 06-Nov-2024

This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet