



SAFETY DATA SHEET FLOCON® MC20

1. Identification

Product identifier

Product name FLOCON® MC20
Chemical name Sulfamic acid
Product number FLOMC20-16, FLOMC20-5

Recommended use of the chemical and restrictions on use

Application Membrane cleaner

Details of the supplier of the safety data sheet

Supplier BWA Water Additives US LLC
1979 Lakeside Parkway
Suite 925
Tucker, GA 30084
USA
T: (800) 600-4523
(Technical/commercial enquiries)
E: msds@wateradditives.com

Distributed by: RPC, 520-888-5551

Emergency telephone number

Emergency telephone Chemtrec Phone: 1-800-424-9300

National emergency telephone number For Medical Emergency: 1-303-623-5716
For Transport Emergency: 1-800-424-9300 (CHEMTREC)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Met. Corr. 1 - H290
Health hazards Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319
Environmental hazards Aquatic Chronic 3 - H412

Label elements

Pictogram



Signal word Warning

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Hazard statements	H290 May be corrosive to metals. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P234 Keep only in original container. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P312 If swallowed: Call a poison center/ doctor if you feel unwell. P302+P352 If on skin: Wash with plenty of water. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see medical advice on this label). P330 Rinse mouth. P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P390 Absorb spillage to prevent material damage. P406 Store in corrosive resistant container with a resistant inner liner. P501 Dispose of contents/ container in accordance with national regulations.
Contains	SULFAMIC ACID

3. Composition/information on ingredients

Mixtures

SULFAMIC ACID	60-100%
CAS number: 5329-14-6	
Classification	
Met. Corr. 1 - H290	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Aquatic Chronic 3 - H412	

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Skin Contact	Immediately remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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Most important symptoms and effects, both acute and delayed

Inhalation	No specific symptoms known. Irritation of nose, throat and airway.
Ingestion	Chemical burns. May cause stomach pain or vomiting.
Skin contact	Chemical burns.
Eye contact	May cause blurred vision and serious eye damage.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is non-combustible. Extinguish with the following media: Water spray, fog or mist. Foam, carbon dioxide or dry powder.
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Special hazards arising from the substance or mixture

Specific hazards	The product is non-combustible. Toxic gases or vapors. Fire or high temperatures create: Vapors/gases/fumes of: Ammonia or amines. Oxides of the following substances: Nitrogen. Sulfur. No unusual fire or explosion hazards noted.
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Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Leave danger zone immediately. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. To prevent release, place container with damaged side up.
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Methods and material for containment and cleaning up

Methods for cleaning up	Avoid the spillage or runoff entering drains, sewers or watercourses. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.
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Reference to other sections	For waste disposal, see section 13.
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7. Handling and storage

Precautions for safe handling

Usage precautions	Avoid spilling. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented.
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Conditions for safe storage, including any incompatibilities

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Storage precautions	Store in a tightly-closed, original container in a dry, cool, and well-ventilated place. Store at temperatures not exceeding 50°C /122°F. Protect from freezing and direct sunlight. If frozen: once thawed, agitate container vigorously to ensure the product is homogeneous. Store away from the following materials; alkalis, acids, cyanides, reducing agents, oxidizing materials and aluminum. Do not use containers made of Carbon steel. Keep separate from food, feeds, fertilizers, and other sensitive materials.
Storage class	Corrosive storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate general and local exhaust ventilation. Use mechanical ventilation if there is a risk of handling causing formation of airborne dust.

Eye/face protection The following protection should be worn: Chemical splash goggles.

Hand protection Selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Gloves should be replaced immediately if signs of degradation are observed. It has been found that gloves made from rubber, neoprene or PVC provide short-term splash protection.

Other skin and body protection Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear apron or protective clothing in case of contact.

Hygiene measures Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection No specific recommendations. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Powder
Color	White/off-white.
Odor	Characteristic.
Odor threshold	Not available. Not available.
pH	pH (diluted solution): 1 - 2.5 @ 1%
Melting point	Not available.
Flash point	Not available.
Freezing Point:	

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Upper/lower flammability or explosive limits	Not applicable.
Bulk density	2 - 2.15 kg/l
Solubility(ies)	~20g @ 20 @ °C Soluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Explosive properties	Scientifically unjustified.
Other information	Not available.

10. Stability and reactivity

Reactivity	Reacts with alkalis and generates heat.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Will not polymerize.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Materials to avoid	Strong alkalis. Strong oxidizing agents. Other metals or alloys.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases/vapors/fumes of: Ammonia or amines. Oxides of the following substances: Nitrogen. Sulfur.

11. Toxicological information**Information on toxicological effects****Supplemental Toxicological Information****Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 1,050.0

Species Guinea pig

ATE oral (mg/kg) 502.51

Inhalation Dust may irritate the respiratory system.

Ingestion Harmful if swallowed. May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhea.

Skin Contact Causes burns.

Eye contact Causes burns.

Acute and chronic health hazards This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.

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Route of entry Skin and/or eye contact Ingestion. Inhalation

12. Ecological Information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

Acute toxicity - fish LC50, 96 hours: 70.3 mg/l, Pimephales promelas (Fat-head Minnow)

Persistence and degradability

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not available.

Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

Other adverse effects

Other adverse effects Not available.

13. Disposal considerations

Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Material should be incinerated or otherwise disposed of as solid waste in accordance with local regulations.

14. Transport information

UN Number

UN No. (TDG) 2967

UN No. (IMDG) 2967

UN No. (ICAO) 2967

UN No. (DOT) 2967

UN proper shipping name

Proper shipping name (TDG) SULFAMIC ACID

Proper shipping name (IMDG) SULFAMIC ACID

Proper shipping name (ICAO) SULFAMIC ACID

Proper shipping name (DOT) SULFAMIC ACID

Transport hazard class(es)

TDG class 8

IMDG Class 8

ICAO class/division 8

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Transport labels



Packing group

TDG Packing Group	III
IMDG packing group	III
ICAO packing group	III
DOT packing group	III

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

IMDG Code segregation group	1. Acids
EmS	F-A, S-B
Classification Code (Adr)	C2

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

Massachusetts "Right To Know" List

None of the ingredients are listed.

Rhode Island "Right To Know" List

All ingredients are listed.

Minnesota "Right To Know" List

None of the ingredients are listed.

New Jersey "Right To Know" List

None of the ingredients are listed.

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Pennsylvania "Right To Know" List

None of the ingredients are listed.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed.

Australia - AICS

All the ingredients are listed or exempt.

Japan - MITI

All the ingredients are listed or exempt.

JAPAN- IHSL

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

Taiwan -TCSI

16. Other information

General information	Classified as corrosive class 8 for transportation on the basis of its effect on mild steel and/or aluminium. For advice on chemical emergencies, spillages, fires or first aid in relation to this product please contact the relevant emergency number below : EU/English Speakers - +44 (0) 1235 239 670 (NCEC) Arabic Speakers - +44 (0) 1235 239 671 Asia/Pacific countries - +65 3158 1074 For emergencies within China - +86 10 5100 3039
Revision comments	H319 removed from US SDS due to software error in v.y was restored.
Issued by	BWA Water Additives Regulatory Group, +44(0)1618646699
Revision date	5/10/2017
Revision	7
Supersedes date	12/20/2016
SDS No.	10945
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.

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NFPA - instability hazard	Unstable if heated. (1)
NFPA - special hazard	N/A
ACA HMIS Health rating.	Serious Hazard. (3)
NFPA - health hazard	Extremely hazardous, serious injury. (3)
NFPA - flammability hazard	Will not burn. (0)
ACA HMIS Flammability rating.	Will not burn. (0)
ACA HMIS Physical hazard rating.	Unstable if heated. (1)
ACA HMIS Personal protection rating.	D

For safety reasons it is IMPERATIVE that customers:-

1. Ensure that all those within their control who use the products are supplied with all relevant information contained within the Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions and warnings contained therein.
2. Consult BWA Water Additives before using or supplying the product for any other applications. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.