

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 4/21/2021 Revision date: 5/14/2021

Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : F20 Electrolyte

1.2. Recommended use and restrictions on use

Recommended use : Electrolyte solution

1.3. Supplier

Manufacturer

Marking Methods 301 S Raymond Avenue Alhambra, CA 91803-1531 T (626) 282 8823

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Not classified.

2.2. GHS Label elements, including precautionary statements

GHS labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Sodium nitrate	CAS-No.: 7631-99-4	1 – 5

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Name	Product identifier	%
2-Ethylhexyl sodium sulfate	CAS-No.: 126-92-1	1 – 5

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for

breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation

persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by

mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the

skin.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Nitrogen oxides.

Oxides of sulfur. Metal oxides.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory

protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to

unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

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6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material),

then place in suitable container. Do not flush into surface water or sewer system. Wear

recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not

swallow. When using do not eat, drink or smoke. Handle and open container with care.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep only in original container. Keep away from (strong) acids.

Do not store in unlabelled containers. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store tightly closed in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

F20 Electrolyte

No additional information available

Sodium nitrate (7631-99-4)

No additional information available

2-Ethylhexyl sodium sulfate (126-92-1)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves

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Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Colour : Clear

Odour : No data available
Odour threshold : No data available

Hq : 8.75 Melting point : 0 °C (32 °F) Freezing point : No data available Boiling point : 100 °C (212 °F) Flash point : No data available Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) Not flammable. Vapour pressure : No data available Relative vapour density at 20 °C : > 1 [Air = 1] Relative density : 1.04

Solubility : Miscible with water. Partition coefficient n-octanol/water : No data available Auto-ignition temperature : No data available : No data available Decomposition temperature No data available Viscosity, kinematic Viscosity, dynamic No data available Explosive limits No data available Explosive properties No data available Oxidising properties : No data available

9.2. Other information

VOC content : 1 % (w/w) Volatility : 0 % (v/v)

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Nitrogen oxides. Oxides of sulfur. Metal oxides.

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.

Acute toxicity (innatation)	. Not dassilled.
Sodium nitrate (7631-99-4)	
LD50 oral rat	1267 mg/kg
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE CA (oral)	1267 mg/kg bodyweight
2-Ethylhexyl sodium sulfate (126-92	2-1)
LD50 oral rat	4 g/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE CA (oral)	4000 mg/kg bodyweight
Skin corrosion/irritation	: Not classified.
	pH: 8.75
Serious eye damage/irritation	: Not classified.
	pH: 8.75
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.
Sodium nitrate (7631-99-4)	
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat. Guideline: OECD Guideline 422 (Combined Repeated

Sodium nitrate (7631-99-4)		
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
2-Ethylhexyl sodium sulfate (126-92	2-1)	
LOAEL (oral, rat, 90 days)	1016 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
NOAEL (oral, rat, 90 days)	488 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
Aspiration hazard	: Not classified.	

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Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the

skin.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Sodium nitrate (7631-99-4)		
LC50 - Fish [1]	2000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
LC50 - Fish [2]	994.4 – 1107 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
2-Ethylhexyl sodium sulfate (126-92-1)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	483 mg/l Test organisms (species): Daphnia magna	
LOEC (chronic)	6.86 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	1.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	≥ 1.357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d'	

12.2. Persistence and degradability

F20	Fle	ctro	lvte

Persistence and degradability Not established.

12.3. Bioaccumulative potential

F20 Electrolyte		
Bioaccumulative potential	Not established.	
Sodium nitrate (7631-99-4)		
Partition coefficient n-octanol/water	-3.8 (at 25 °C)	

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

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SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations

: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

14.1. UN number

DOT NA No : Not applicable UN-No. (TDG) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

Transportation of Dangerous Goods (TDG)

Transport hazard class(es) (TDG) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable Packing group (TDG) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

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15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Potassium nitrate(7757-79-1)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List
Sodium nitrate(7631-99-4)	U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List

SECTION 16: Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 05/14/2021 Other information : None.

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