

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

**SECTION 1. IDENTIFICATION**

Product name : NeXtal Anions Suite

**Manufacturer or supplier's details**Company : NeXtal  
6201 Trust Dr  
Holland, OH 43528  
USA

Telephone : 419-740-6600

E-mail address : [www.calibrescientific.com](http://www.calibrescientific.com)Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300  
Outside USA & Canada (703) 527-3887  
Chemtrec ID# 696910**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**Oxidizing liquids : Category 3  
Acute toxicity (Oral) : Category 4  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Carcinogenicity : Category 1B  
Specific target organ systemic toxicity - single exposure : Category 3 (Respiratory system)**GHS Label element**

## NeXtal Anions Suite

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H272 May intensify fire; oxidizer.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H350 May cause cancer.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P210 Keep away from heat/sparks/open flames/hot surfaces.  
No smoking.  
P221 Take any precaution to avoid mixing with combustibles.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Substance name : Semifinished Anions Suite

### Hazardous ingredients

Chemical Name	CAS-No.	Concentration (% w/w)
sodium nitrate	7631-99-4	>= 20 - < 30
Sodium succinate dibasic hexahydrate	6106-21-4	>= 20 - < 30
sodium thiocyanate	540-72-7	>= 10 - < 20
sodium fluoride	7681-49-4	>= 1 - < 10
4-Morpholineethanesulfonic acid	145224-94-8	>= 1 - < 10

## SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Show this material safety data sheet to the doctor in attendance.

If inhaled : If unconscious place in recovery position and seek medical advice.

## NeXtal Anions Suite

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

		If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eyes. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	:	If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. No information available.
Notes to physician	:	No information available.

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	:	Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	Carbon oxides Nitrogen oxides (NOx) Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). potassium oxide Bromine compounds Sulfur oxides
Specific extinguishing methods	:	In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Avoid breathing dust/fumes/gas/mist/vapors/spray.
Environmental precautions	:	Prevent product from entering drains.

## NeXtal Anions Suite

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13).  
Do not use sodium hypochlorite as a cleaning agent

### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Keep away from combustible material.

Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapors/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sodium fluoride	7681-49-4	TWA	2.5 mg/m <sup>3</sup> (Fluorine)	NIOSH REL
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	OSHA Z-1
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	ACGIH
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	OSHA P0
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	NIOSH REL
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	OSHA Z-1
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	ACGIH
		TWA	2.5 mg/m <sup>3</sup> (Fluorine)	OSHA P0

#### Hazardous components without workplace control parameters

## NeXtal Anions Suite

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

Ingredients	CAS-No.
sodium nitrate	7631-99-4
Sodium succinate dibasic hexahydrate	6106-21-4
sodium thiocyanate	540-72-7
4-Morpholineethanesulfonic acid	145224-94-8

### Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
	7681-49-4	Fluoride (Fluorine)	Urine	Prior to shift (16 hours after exposure ceases)	2 mg/l	ACGIH BEI
		Fluoride (Fluorine)	Urine	End of shift (As soon as possible after exposure ceases)	3 mg/l	ACGIH BEI

### Personal protective equipment

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

Hand protection  
Material : Protective gloves

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses  
Wear face-shield and protective suit for abnormal processing problems.  
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the workplace.  
Footwear protecting against chemicals

Hygiene measures : Keep away from food and drink.  
Wash hands before breaks and at the end of workday.  
Ensure adequate ventilation, especially in confined areas.  
Avoid contact with the skin and the eyes.  
When using do not eat, drink or smoke.

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Color	: No data available
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Thiocyanates can develop poisonous gas in contact with strong acids. Keep away from oxidizing agents, and acidic or alkaline products.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Harmful if swallowed.

**Product:**

Acute oral toxicity	: No data available  Acute toxicity estimate: 1,679 mg/kg Method: Calculation method
Acute inhalation toxicity	: No data available  Acute toxicity estimate: > 40 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method
Acute dermal toxicity	: No data available  Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

**Ingredients:****sodium nitrate:**

Acute oral toxicity	: LD50 Oral (Rat): 1,267 mg/kg  LD50 Oral (Rabbit): 2,680 mg/kg
---------------------	---

**sodium thiocyanate:**

Acute oral toxicity	: LD50 Oral (Rat): 764 mg/kg
---------------------	------------------------------

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

Acute inhalation toxicity : Acute toxicity estimate: 1.6 mg/l  
Test atmosphere: dust/mist

**sodium fluoride:**  
Acute oral toxicity : LD50 Oral (Rat, female): 148.5 mg/kg  
LD50 Oral (Mouse): 44 mg/kg  
LD50 Oral (Rabbit): 200 mg/kg  
LD50 Oral (Rat, male): 223 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks:  
May irritate skin.

**Ingredients:**

**sodium thiocyanate:**  
Species: Rabbit  
Result: No skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks:  
May cause irreversible eye damage.

**Ingredients:**

**sodium thiocyanate:**  
Species: Rabbit  
Result: No eye irritation

**Respiratory or skin sensitization**

Skin sensitization: Not classified based on available information.  
Respiratory sensitization: Not classified based on available information.

**Ingredients:**

**sodium thiocyanate:**  
Species: Humans  
Result: positive

Species: Guinea pig  
Result: positive

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.



## NeXtal Anions Suite

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

<b>IARC</b>	Group 2A: Probably carcinogenic to humans	
	sodium nitrate	7631-99-4
<b>OSHA</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
<b>NTP</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

**Reproductive toxicity**

Not classified based on available information.

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Further information**

No data available

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity****Product:**

Toxicity to fish	: No data available
Toxicity to algae	: No data available
Toxicity to bacteria	: No data available

**Ingredients:****sodium nitrate:**

Toxicity to fish	: LC50 (Gambusia affinis (Mosquito fish)): 6,650 mg/l Exposure time: 96 h Test Type: static test
------------------	--

**sodium thiocyanate:**

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 233 mg/l Exposure time: 96 h  LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 11 mg/l Exposure time: 48 h
Toxicity to algae	: (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

Toxicity to bacteria : EC10 (Bacteria): 8,000 mg/l  
Method: OECD Test Guideline 209

**sodium fluoride:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 200 mg/l  
Exposure time: 96 h

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available

**Ingredients:****sodium thiocyanate:**

Partition coefficient: n-octanol/water : Remarks: Not applicable

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances  
Remarks: This product neither contains, nor was  
manufactured with a Class I or Class II ODS as defined by the  
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +  
B).

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and  
national regulations.

Contaminated packaging : Dispose of as unused product.  
Do not re-use empty containers.

**NeXtal Anions Suite**

Version 2.0

Revision Date 03/31/2020

Print Date 03/31/2020

**SECTION 14. TRANSPORT INFORMATION****Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

**Domestic regulation****SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know****SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

sodium nitrate 7631-99-4

**US State Regulations**

**California Prop. 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory

**NeXtal Anions Suite**

Version 2.0

Revision Date 02/10/2020

Print Date 2/27/2020

concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

Revision Date : 03/31/2020

The information provided in this Material 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.