

## SAFETY DATA SHEET

according to the Globally Harmonized System and US regulation

### Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

#### 1. IDENTIFICATION

Product name : Dissolvine Na

Product Use Description : Specific use(s): Chelating agent

Company : Nouryon Functional Chemicals LLC  
525 West Van Buren Street  
Chicago IL 60607-3823  
US

Telephone : +18009067979

Fax : +13125447167

E-mail address : sds\_chelates@nouryon.com

Emergency telephone : 24 hours: +31 57 06 79211, CHEMTREC-USA: 1-800-424-9300, CHEMTREC outside USA +1-703-527-3887, CANUTEC-CANADA: 1-613-996-6666, 化学事故应急咨询电话: 国家化学事故应急响应中心 +86 532 8388 9090

#### 2. HAZARDS IDENTIFICATION


##### Emergency Overview

Appearance	granular
Color	off-white
Odor	odorless
Hazard Summary	Risk of dust explosion.

##### GHS Classification

Combustible dust  
Acute toxicity, Category 4, Inhalation  
Skin irritation, Category 2  
Eye irritation, Category 2A  
Carcinogenicity, Category 2  
Specific target organ systemic toxicity - repeated exposure, Category 2, Inhalation, Respiratory Tract

##### GHS label elements

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : If small particles are generated during further processing,

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

handling or by other means, may form combustible dust concentrations in air.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H351 Suspected of causing cancer.

H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

## Precautionary Statements

### : **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust or fume.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

### **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

### **Storage:**

P405 Store locked up.

### **Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

## Carcinogenicity:

### **IARC**

: Group 2B: Possibly carcinogenic to humans

Nitilotriacetic acid, trisodium salt 5064-31-3

### **OSHA**

: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

### **NTP**

: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name : Ethylenediaminetetraacetic acid, tetrasodium salt  
Pure substance/mixture : Mixture

### Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2A; H319 STOT RE 2; H373	>= 70 - < 90
Nitriлотriacetic acid, trisodium salt	5064-31-3	Acute Tox. 4; H302 Eye Irrit. 2A; H319 Carc. 2; H351	>= 1 - < 5
Sodium hydroxide	1310-73-2	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 Aquatic Acute 3; H402	>= 1 - < 1.9

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

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

Inhalation : Remove to fresh air.  
Keep patient warm and at rest.  
Rinse nose and mouth with water.

Skin contact : Take off contaminated clothing and shoes immediately.  
If skin irritation persists, call a physician.

Eye contact : Rinse with plenty of water.  
Get medical attention immediately. Continue to rinse during transport of patient.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.

Ingestion : Clean mouth with water and drink afterwards plenty of water.  
Never give anything by mouth to an unconscious person.  
Obtain medical attention.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

## Notes to physician

Symptoms	: The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
Risks	: Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if inhaled.
Treatment	: Treat symptomatically.

---

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards during fire fighting / Specific hazards arising from the chemical	: Do not allow run-off from fire fighting to enter drains or water courses. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
Combustion products	: Nitrogen oxides (NOx)
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

---

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Personal precautions	: Use personal protective equipment. Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
Emergency measures on accidental release	: Evacuate personnel to safe areas. Only qualified personnel equipped with suitable protective equipment may intervene. Prevent unauthorized persons entering the zone.
Environmental precautions	: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up / Methods for containment	: Pick up and arrange disposal without creating dust. Sweep up and shovel.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

Keep in suitable, closed containers for disposal.

Reference to other sections : For disposal considerations see section 13.

For personal protection see section 8.

## 7. HANDLING AND STORAGE

### Handling

Advice on safe handling : For personal protection see section 8.  
 Avoid formation of respirable particles.  
 Do not breathe vapors/dust.  
 Avoid contact with skin, eyes and clothing.  
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 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.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.  
 No sparking tools should be used.

### Storage

Requirements for storage areas and containers : Prevent unauthorized access.  
 Keep in a dry place.  
 Store at room temperature in the original container.  
 Keep container tightly closed.

Other data : No decomposition if stored and applied as directed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Sodium hydroxide	1310-73-2	CEIL	2 mg/m <sup>3</sup>	1994-09-01	ACGIH	
		C	2 mg/m <sup>3</sup>	2013-03-01	ACGIH	
	Further information	:	URT irr: Upper Respiratory Tract irritation eye irr: Eye irritation skin irr: Skin irritation			
		C	2 mg/m <sup>3</sup>	2013-10-08	NIOSH REL	
		TWA	2 mg/m <sup>3</sup>	1997-08-04	OSHA Z-1	
		C	2 mg/m <sup>3</sup>	1989-01-19	OSHA P0	
		C	2 mg/m <sup>3</sup>	2014-11-26	CAL PEL	
Dust		TWA	50 Million particles per cubic foot	2011-07-01	OSHA Z-3	total dust
	Further	:	a: Based on impinger samples counted by light-field techniques.			

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

	information		d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c			
Dust		TWA	15 mg/m3	2011-07-01	OSHA Z-3	total dust
	Further information	:	d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z-1.			
Dust		TWA	5 mg/m3	2011-07-01	OSHA Z-3	respirable fraction
	Further information	:	d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z-1.			
Dust		TWA	15 Million particles per cubic foot	2011-07-01	OSHA Z-3	respirable fraction
	Further information	:	a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c			

ACGIH: American Conference of Governmental Industrial Hygienists  
 BEI: Biological Exposure Index  
 MAC: Maximum Allowable Concentration  
 NIOSH: National Institute for Occupational Safety and Health  
 OEL: OEL: Occupational exposure limit.  
 STEL: Short term exposure limit  
 TWA: Time Weighted Average

## Hazardous substance

Substance name	CAS-No.	Value	Control parameters	Basis	Update
Sodium hydroxide	1310-73-2	Immediately Dangerous to Life or Health Concentration Value	10 mg/m3	US IDLH	1995-03-01
	Further information	:	Immediately Dangerous to Life or Health Concentrations (IDLH)		

## Appropriate engineering controls

Provide appropriate exhaust ventilation at places where dust is formed.  
 Ensure that eyewash stations and safety showers are close to the workstation location.

## Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Skin and body protection : Protective suit

Respiratory protection : Half mask with a particle filter P2 (EN 143)

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
 When using do not eat or drink.  
 When using do not smoke.  
 Wash hands before breaks and at the end of workday.

## Environmental exposure controls

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

General advice : Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form : granular  
Color : off-white  
Odor : odorless  
Odor Threshold : Not applicable

### Safety data

pH : 11 - 12 1% (water)  
Melting point : Decomposes before melting.  
Boiling point/boiling range : Not applicable  
Flash point : Not applicable  
Ignition temperature :  $\geq 200$  °C  
Method: Auto-ignition of a 5mm dust layer according to EN 50281-2-1  
Evaporation rate : Not applicable  
Flammability (solid, gas) : Not classified as a flammability hazard  
May form combustible dust concentrations in air during  
processing, handling or other means.  
Flammability (liquids) : Not applicable  
Lower explosion limit :  $\geq 40$  g/m<sup>3</sup>  
Upper explosion limit : Not applicable  
Vapor pressure : Not applicable  
Relative vapor density : Not applicable  
Relative density : No data available  
Bulk density : ca. 650 kg/m<sup>3</sup>  
Water solubility : ca. 1,100 g/l  
Solubility in other solvents : No data available  
Partition coefficient: n-  
octanol/water : log Pow:  $< 0$   
Autoignition temperature : No data available

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

Decomposition temperature	: No data available
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not classified as oxidizing.

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

---

## 10. STABILITY AND REACTIVITY

Conditions to avoid	: None known.
Materials to avoid	: None known.
Hazardous decomposition products	: Carbon oxides nitrogen oxides (NOx)
Thermal decomposition	: No data available
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: Dust may form explosive mixture in air.

---

## 11. TOXICOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Hazard Summary

Acute toxicity	: Harmful if inhaled.
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/eye irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Respiratory sensitization: Not classified based on available information. Skin sensitization: Not classified based on available information.
Germ cell mutagenicity	: Not classified based on available information.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified based on available information.
STOT-single exposure	: Not classified based on available information.
STOT-repeated exposure	: May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

Aspiration hazard : Not classified based on available information.

## Potential Health Effects

Inhalation : Thermal decomposition can lead to release of irritating gases and vapors.  
Product dust may be irritating to respiratory system.  
Harmful if inhaled.

Skin : Product dust may be irritating to skin.  
Causes skin irritation.

Eyes : Causes serious eye damage.

Ingestion : May be harmful if swallowed.

Aggravated Medical Condition : None known.

Symptoms of Overexposure : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

## Toxicology Assessment

Further information : No further data available.

## Test result

Acute oral toxicity : Acute toxicity estimate: 2,022 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 1.74 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

Target Organ Systemic Toxicant - Repeated exposure : Routes of exposure: Inhalation  
Target Organs: Respiratory Tract  
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

## Carcinogenicity:

IARC : Group 2B: Possibly carcinogenic to humans  
Nitrilotriacetic acid, trisodium salt 5064-31-3

OSHA : No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## TOXICOLOGY DATA FOR THE INGREDIENTS:

### Toxicology Assessment

#### Component: Nitrilotriacetic acid, trisodium salt

CMR effects : Carcinogenicity: Limited evidence of a carcinogenic effect.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

## **Component: Sodium hydroxide**

CMR effects : Mutagenicity: In vivo tests did not show mutagenic effects, Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

## **Test result**

### **Component: Ethylenediaminetetraacetic acid, tetrasodium salt**

Acute oral toxicity : LD50: 1,780 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 1 - 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 412  
Read-across (Analogy)

Skin irritation : Species: Rabbit  
Result: No skin irritation  
Method: OECD Test Guideline 404  
Read-across (Analogy)

Eye irritation : Species: Rabbit  
Result: Eye irritation  
Method: OECD Test Guideline 405

Sensitization : Maximization Test  
Species: Guinea pig  
Result: Does not cause skin sensitization.  
Method: OECD Test Guideline 406  
Read-across (Analogy)

Germ cell mutagenicity  
Genotoxicity in vitro : Result: negative  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
Read-across (Analogy)

Genotoxicity in vivo : Chromosome aberration test in vivo  
Species: Mouse  
Method: OECD Test Guideline 474  
Result: negative  
Read-across (Analogy)

Carcinogenicity : Species: Rat  
Application Route: Ingestion  
Result: Not classified due to data which are conclusive although insufficient for classification.  
Read-across (Analogy)

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

- Reproductive toxicity : Species: Rat  
NOAEL:  
F1: > 250 mg/kg,  
Read-across (Analogy), Information taken from reference works and the literature.
- Target Organ Systemic Toxicant - Single exposure : Based on available data, the classification criteria are not met.
- Target Organ Systemic Toxicant - Repeated exposure : Routes of exposure: Inhalation  
Target Organs: Respiratory Tract  
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
- Aspiration toxicity : Not classified due to data which are conclusive although insufficient for classification.

## **Component: Nitrotriacetic acid, trisodium salt**

- Acute oral toxicity : LD50: 1,740 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401
- Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity  
Information taken from reference works and the literature.
- Skin irritation : Species: Rabbit  
Result: No skin irritation
- Eye irritation : Result: Irritating to eyes.
- Sensitization : Buehler Test  
Species: Guinea pig  
Result: Does not cause skin sensitization.  
Method: OECD Test Guideline 406
- Germ cell mutagenicity  
Genotoxicity in vitro : Chromosome aberration test in vitro  
Result: negative  
Method: OECD Test Guideline 473  
Information taken from reference works and the literature.
- Genotoxicity in vivo : Chromosome aberration test in vivo  
Species: Mouse  
Result: negative  
Information taken from reference works and the literature.
- Reproductive toxicity : Species: Rat  
NOAEL: > 450 mg/kg,  
Method: OECD Test Guideline 416  
Information taken from reference works and the literature.

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

Target Organ Systemic Toxicant - Single exposure : Not classified due to data which are conclusive although insufficient for classification.

Target Organ Systemic Toxicant - Repeated exposure : Not classified due to data which are conclusive although insufficient for classification.

Aspiration toxicity : Not classified due to data which are conclusive although insufficient for classification.

## **Component: Sodium hydroxide**

Skin irritation : Result: Causes severe burns.

Eye irritation : Result: Risk of serious damage to eyes.

Sensitization : Result: Does not cause skin sensitization.

Germ cell mutagenicity Genotoxicity in vitro : In vitro tests did not show mutagenic effects

---

## 12. ECOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Ecotoxicology Assessment

Additional ecological information : None known.

#### Test result

#### Elimination information (persistence and degradability)

Bioaccumulation : Not expected considering the low log Pow value.

Mobility : Adsorption to the solid soil particles is not expected.

Biodegradability : Not readily biodegradable, but will degrade after a longer period.

#### Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

#### Hazardous to the ozone layer

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).

### INGREDIENTS:

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

## Ecotoxicology Assessment

### Component: Sodium hydroxide

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

## Test result

### Component: Ethylenediaminetetraacetic acid, tetrasodium salt

#### Ecotoxicity effects

- Toxicity to fish : LC50: > 100 mg/l  
Exposure time: 96 h  
Species: Fish
- Toxicity to daphnia and other aquatic invertebrates : EC50: 140 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: DIN 38412  
Read-across (Analogy)
- Toxicity to algae : EC50: > 100 mg/l  
Exposure time: 72 h  
Species: algae
- Toxicity to fish (Chronic toxicity) : NOEC: > 25.7 mg/l  
Exposure time: 35 d  
Species: Danio rerio (zebra fish)  
Test Type: flow-through test  
Method: OECD Test Guideline 210  
Read-across (Analogy)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 25 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Read-across (Analogy)

#### Elimination information (persistence and degradability)

- Bioaccumulation : Not expected considering the low log Pow value.
- Mobility : Adsorption to the solid soil particles is not expected.
- Biodegradability : Not readily biodegradable, but will degrade after a longer period.

#### Further information on ecology

- Biochemical Oxygen Demand (BOD) : No data available

### Component: Nitrilotriacetic acid, trisodium salt

#### Ecotoxicity effects

- Toxicity to fish : LC50: > 100 mg/l

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

	Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates	: EC50: > 100 mg/l Exposure time: 96 h Species: Gammarus fasciatus (freshwater shrimp)
Toxicity to algae	: EC50: > 100 mg/l Exposure time: 72 h Species: Desmodesmus subspicatus (green algae) Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	: NOEC: > 54 mg/l Exposure time: 30 d Species: Pimephales promelas (fathead minnow) Information taken from reference works and the literature.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 9.3 mg/l Exposure time: 147 d Species: Gammarus fasciatus (freshwater shrimp)

## **Elimination information (persistence and degradability)**

Bioaccumulation	: Bioaccumulation is unlikely.
Mobility	: Adsorption to the solid soil particles is not expected.
Biodegradability	: Result: Readily biodegradable.

## **Further information on ecology**

Biochemical Oxygen Demand (BOD)	: No data available
---------------------------------	---------------------

## **Component: Sodium hydroxide**

### **Ecotoxicity effects**

Toxicity to daphnia and other aquatic invertebrates	: EC50: 40.4 mg/l Exposure time: 48 h Species: Ceriodaphnia (water flea) Test Type: Immobilization
---	---

## **Elimination information (persistence and degradability)**

Bioaccumulation	: Does not bioaccumulate.
Mobility	: Can be leached out from soil.
Distribution among environmental compartments	: Transport to air is not expected.
Biodegradability	: Result: Not applicable inorganic

## **Further information on ecology**

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

Biochemical Oxygen Demand (BOD) : Not applicable

---

## 13. DISPOSAL CONSIDERATIONS

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Hazardous waste  
Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### International Regulations

#### ADR

Not regulated as a dangerous good

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

### Further information for transport

Not classified as dangerous in the meaning of transport regulations.

### Domestic regulation

#### 49 CFR

Not regulated as a dangerous good

#### TDG

Not regulated as a dangerous good

#### NOM-002-SCT

Not regulated as a dangerous good

---

## 15. REGULATORY INFORMATION

### Notification status

DSL : YES. All components of this product are on the Canadian DSL  
AICS : YES. On the inventory, or in compliance with the inventory  
ENCS : YES. On the inventory, or in compliance with the inventory  
ISHL : YES. On the inventory, or in compliance with the inventory  
KECI : YES. On the inventory, or in compliance with the inventory  
PICCS : YES. On the inventory, or in compliance with the inventory  
IECSC : YES. On the inventory, or in compliance with the inventory  
TCSI : YES. On the inventory, or in compliance with the inventory

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

TSCA : YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviations, see section 16.

## TSCA list

TSCA 5(a)(2) : No substances are subject to a Significant New Use Rule.  
TSCA 12(b) : No substances are subject to TSCA 12(b) export notification requirements.

## EPCRA - Emergency Planning and Community Right-to-Know

### CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)
Sodium hydroxide	1310-73-2	1000 lbs

### SARA 304 Extremely Hazardous Substances Reportable Quantity

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

**SARA 311/312 Hazards** : Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489).

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Sodium hydroxide 1310-73-2 1 - 5 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sodium hydroxide 1310-73-2 1 - 5 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### US State Regulations

#### Massachusetts Right To Know

Nitriotriacetic acid, trisodium salt 5064-31-3  
Sodium hydroxide 1310-73-2

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

## Pennsylvania Right To Know

Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8
Water	7732-18-5
Sodium hydroxide	1310-73-2

## 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.

A related substance Nitrotri-acetic acid, trisodium salt, monohydrate (CAS number 18662-53-8) is known to the State of California to cause cancer.

## 16. OTHER INFORMATION

### Full text of H-Statements

H290	: May be corrosive to metals.
H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H351	: Suspected of causing cancer.
H373	: May cause damage to organs through prolonged or repeated exposure if inhaled.
H402	: Harmful to aquatic life.

### Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
CAL PEL	: California permissible exposure limits for chemical contaminants (Title 8, Article 107)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA P0	: USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	: USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts

ACGIH / C	: Ceiling limit
ACGIH / CEIL	: Threshold Limit Value - Ceiling (TLV-C)
CAL PEL / C	: Ceiling
NIOSH REL / C	: Ceiling value not be exceeded at any time.
OSHA P0 / C	: Ceiling limit
OSHA Z-1 / TWA	: 8-hour time weighted average
OSHA Z-3 / TWA	: 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

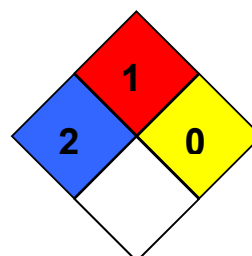
US / Z8

Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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 concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; 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; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

## Further information

**HMIS Classification** : Health Hazard: 2  
Chronic Health Hazard: \*  
Flammability: 2  
Physical hazards: 0

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 1  
Reactivity Hazard: 0



## Notification status explanation

REACH	1907/2006 (EU)
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory (TCSI)
TSCA	United States TSCA Inventory

## Further information

# Dissolvine Na

Version 2

Revision Date 11/14/2018

Print Date 07/09/2019

US / Z8

---

Revision Date 11/14/2018

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

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.