



**Be Right™**

# SAFETY DATA SHEET

Issue Date 13-Sep-2016

Revision Date 13-Sep-2016

Version 2

Page 1 / 16

## 1. IDENTIFICATION

### Product identifier

**Product Name** Nitrification Inhibitor Formula 2533

### Other means of identification

**Product Code(s)** 253334

**Safety data sheet number** M00566

### Recommended use of the chemical and restrictions on use

**Recommended Use** Nitrification inhibitor.

**Uses advised against** None.

**Restrictions on use** None.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Hach Company  
P.O.Box 389 Loveland, CO 80539 USA  
(970) 669-3050

#### Emergency telephone number

(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Aquatic Acute Toxicity
------------------------

Category 3
------------

#### **Hazards not otherwise classified (HNOC)**

Not applicable

#### **Label elements**

#### **Hazard statements**

H402 - Harmful to aquatic life

EUH210 - Safety data sheet available on request

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

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Information**

Harmful to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

**Chemical Family** Mixture.

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Sodium sulfate	7757-82-6	90 - 100%	-
Nitrapyrin	1929-82-4	1 - 5%	-

**4. FIRST AID MEASURES**

**Description of first aid measures**

**General advice** In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.

**Skin contact** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.

**Inhalation** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

**Ingestion** IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.

**Self-protection of the first aider** Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Flammable properties**

During a fire, this product decomposes to form toxic gases.

**Specific hazards arising from the chemical**

May react violently with. Strong acids. Strong bases. Aluminum / Aluminum compounds.

**Hazardous combustion products**

Sodium monoxide. Sulfur oxides. Carbon monoxide, Carbon dioxide. Nitrogen oxides. Chlorides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**U.S. Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**EC Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**WHMIS Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions**

Avoid release to the environment. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment**

Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

**Emergency Response Guide Number**

Not applicable

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**Flammability class**

Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitrapyrin 1 - 5%	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 15 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust STEL: 20 mg/m <sup>3</sup> total dust

Chemical Name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick OEL	New Foundland & Labrador OEL
Nitrapyrin 1 - 5%	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>

Chemical Name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
Nitrapyrin 1 - 5%	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>

Chemical Name	Quebec OEL	Saskatchewan OEL	Yukon OEL
Nitrapyrin 1 - 5%	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>

#### **Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### **Legend**

See section 16 for terms and abbreviations

### Appropriate engineering controls

#### **Engineering Controls**

Showers  
 Eyewash stations  
 Ventilation systems

### Individual protection measures, such as personal protective equipment

#### **Eye/face protection**

Wear safety glasses with side shields (or goggles).

#### **Skin and body protection**

Wear protective gloves and protective clothing.

#### **Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended.

### Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 5 / 16

**Physical state** Solid  
**Gas Under Pressure** Not classified according to GHS criteria  
**Appearance** crystalline **Color** white  
**Odor** sweet **Odor threshold** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	No data available	
<b>pH</b>	No data available	
<b>Melting point/freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	No data available	
<b>Evaporation rate</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable	
<b>Vapor density (air = 1)</b>	Not applicable	
<b>Specific gravity (water = 1 / air = 1)</b>	1.3858	
<b>Partition Coefficient (n-octanol/water)</b>	No data available	
<b>Soil Organic Carbon-Water Partition Coefficient</b>	No data available	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	No data available	
<b>Dynamic viscosity</b>	Not applicable	
<b>Kinematic viscosity</b>	Not applicable	

#### Solubility(ies)

##### **Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

##### **Solubility in other solvents**

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

#### Other Information

**Metal Corrosivity** Not classified as corrosive to metal according to GHS criteria  
**Steel Corrosion Rate** Not applicable  
**Aluminum Corrosion Rate** Not applicable  
**Volatile Organic Compounds (VOC) Content** Not applicable.

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 6 / 16

<b>Bulk density</b>	No data available
<b>Explosive properties</b>	Not classified according to GHS criteria.
<b>Explosion data</b>	Does not burn, but may melt in a fire, releasing toxic fumes.
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Flammable properties</b>	During a fire, this product decomposes to form toxic gases.
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No data available
<b>Lower flammability limit:</b>	No data available
<b>Flash point</b>	Not applicable
<b>Method</b>	No information available
<b>Oxidizing properties</b>	Not classified according to GHS criteria.
<b>Reactivity properties</b>	Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

## 10. STABILITY AND REACTIVITY

### **Reactivity properties**

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

### **Chemical stability**

Stable under recommended storage conditions.

### **Special dangers of the product**

None reported

### **Possibility of Hazardous Reactions**

None under normal processing.

#### **Hazardous polymerization**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Heat. Excess moisture.

### **Incompatible materials**

Powdered metals. Oxidizers.

### **Hazardous Decomposition Products**

Sodium monoxide. Sulfur oxides. Chlorides. Carbon dioxide. Carbon monoxide.

### **Explosive properties**

Not classified according to GHS criteria. Does not burn, but may melt in a fire, releasing toxic fumes.

Product Code(s) 253334  
 Issue Date 13-Sep-2016  
 Version 2

Product Name Nitrification Inhibitor Formula 2533  
 Revision Date 13-Sep-2016  
 Page 7 / 16

Upper explosion limit No data available

Lower explosion limit No data available

**Autoignition temperature**

No data available

**Sensitivity to Static Discharge**

None reported

**Sensitivity to Mechanical Impact**

None reported

**11. TOXICOLOGICAL INFORMATION**

NIOSH (RTECS) Number None reported

**Information on Likely Routes of Exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	No known effect based on information supplied.
<b>Skin contact</b>	No known effect based on information supplied.
<b>Ingestion</b>	No known effect based on information supplied.
<b>Aggravated Medical Conditions</b>	None known.
<b>Toxicologically synergistic products</b>	None known.
<b>Toxicokinetics, metabolism and distribution</b>	No information available.

**Product Acute Toxicity Data**

Oral Exposure Route No data available  
 Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

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

<b>ATEmix (oral)</b>	40,693.00
<b>ATEmix (dermal)</b>	36,797.00

**Ingredient Acute Toxicity Data**

**Oral Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	Mouse LD <sub>50</sub>	5989 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

**Dermal Exposure Route**

Chemical Name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
---------------	----------	----------	----------	-----------------------	-------------------------------

	type	dose	time		sources for data
Nitrapyrin (1 - 5%) CAS#: 1929-82-4	Rabbit LD <sub>50</sub>	850 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	Standard Draize Test	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)
Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	Open Irritation Test	Guinea pig	100 mg	5 days	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)

**Product Serious Eye Damage/Eye Irritation Data**

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	Standard Draize Test	Rabbit	90 mg	24 hours	Not corrosive or irritating to eyes	ECHA (The European Chemicals Agency)

**Sensitization Information**

**Product Sensitization Data**

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

**Ingredient Sensitization Data**

**Skin Sensitization Exposure Route**

Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Test method	Species	Results	Key literature references and sources for data
Sodium sulfate (90 - 100%)	OECD Test No. 406: Skin	Guinea pig	Not confirmed to be a skin sensitizer	HSDB (Hazardous Substances Data Bank)



Product Code(s) 253334  
 Issue Date 13-Sep-2016  
 Version 2

Product Name Nitrification Inhibitor Formula 2533  
 Revision Date 13-Sep-2016  
 Page 9 / 16

CAS#: 7757-82-6	Sensitization			
-----------------	---------------	--	--	--

Respiratory Sensitization Exposure Route No data available.

**Chronic Toxicity Information**

**Product Repeat Dose Toxicity Data**

Oral Exposure Route No data available.

Dermal Exposure Route No data available.

Inhalation (Dust/Mist) Exposure Route No data available.

Inhalation (Vapor) Exposure Route No data available.

Inhalation (Gas) Exposure Route No data available.

**Ingredient Repeat Dose Toxicity Data**

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route Toxicological data for ingredients is not indicative of likely harm.

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Sodium sulfate	7757-82-6	-	-	-	-
Nitrapyrin	1929-82-4	-	-	-	-

**Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	Does not apply

**Product Carcinogenicity Data** No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

**Ingredient Carcinogenicity Data**

Oral Exposure Route No data available

Dermal Exposure Route No data available

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 10 / 16

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Product Germ Cell Mutagenicity***invitro***Data**  
 No data available.

**Ingredient Germ Cell Mutagenicity***invitro***Data** No data available

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Ingredient Germ Cell Mutagenicity***invivo***Data**

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Ingredient Reproductive Toxicity Data**

**Oral Exposure Route** Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	Mouse TD <sub>Lo</sub>	14000 mg/kg	4 days	<b>Effects on Newborn</b> Other neonatal measures or effects	RTECS (Registry of Toxic Effects of Chemical Substances)
Nitrapyrin (1 - 5%) CAS#: 1929-82-4	Rabbit TD <sub>Lo</sub>	390 mg/kg	12 days	<b>Specific Developmental Abnormalities</b> Craniofacial (including nose and tongue)	ECHA (The European Chemicals Agency)

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

Product Code(s) 253334  
 Issue Date 13-Sep-2016  
 Version 2

Product Name Nitrification Inhibitor Formula 2533  
 Revision Date 13-Sep-2016  
 Page 11 / 16

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

## 12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

### Product Ecological Data

#### Aquatic toxicity

Fish

No data available

Crustacea

No data available

Algae

No data available

#### Terrestrial toxicity

Soil

No data available

Vertebrates

No data available

Invertebrates

No data available

### Ingredient Ecological Data

#### Aquatic toxicity

##### Fish

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	96 hours	None reported	LC <sub>50</sub>	56 mg/L	IUCLID (The International Uniform Chemical Information Database)
Nitrapyrin (1 - 5%) CAS#: 1929-82-4	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	1.7 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	7960 mg/L	IUCLID (The International Uniform Chemical Information Database)
Nitrapyrin (1 - 5%) CAS#: 1929-82-4	96 hours	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	3.4 mg/L	Vendor SDS

##### Crustacea

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	3150 mg/L	IUCLID (The International Uniform Chemical Information Database)
Nitrapyrin (1 - 5%) CAS#: 1929-82-4	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	4 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance) Vendor SDS

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 12 / 16

**Algae** No data available

**Terrestrial toxicity**

**Soil** No data available

**Vertebrates** No data available

**Invertebrates** No data available

**Other Information**

**Persistence and degradability**

None known.

**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data**

No data available

**Bioaccumulation**

None known.

**Product Bioaccumulation Data** No data available.

**Ingredient Bioaccumulation Data** No data available

**Additional information**

**Product Information** No data available

**Partition Coefficient (n-octanol/water)** No data available

**Ingredient Information**

Chemical Name	Partition Coefficient (n-octanol/water)	Method
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	log K <sub>ow</sub> = -3	No information available

**Mobility**

Mobility in soil: Moderate to high mobility. If available, see ingredient data below.

**Product Information** No data available

**Soil Organic Carbon-Water Partition Coefficient** No data available

**Ingredient Information**

Chemical Name	Soil Organic Carbon-Water Partition Coefficient	Method
Sodium sulfate (90 - 100%) CAS#: 7757-82-6	log K <sub>oc</sub> = -1.4	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™

### Additional information

#### Water solubility

#### Product Information

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

#### Ingredient Information

<u>Chemical Name</u>	<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water solubility temperature °C</u>	<u>Water solubility temperature °F</u>
Sodium sulfate CAS#: 7757-82-6	Completely soluble	160000 mg/L	20 °C	68 °F
Nitrapyrin CAS#: 1929-82-4	Slightly soluble	40 mg/L	20 °C	68 °F

#### Other adverse effects

Contains a substance with an endocrine-disrupting potential.

## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### **Disposal of wastes**

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

##### **Contaminated packaging**

Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

##### **Special instructions for disposal**

Dilute material with excess water making a weaker than 5% solution. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. If permitted by regulation. Dispose of material in an E.P.A. approved hazardous waste facility.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**Note:** No special precautions necessary.

#### Additional information

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 14 / 16

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following:  
UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.  
If the item is not regulated, the Chemical Kit classification does not apply.

## 15. REGULATORY INFORMATION

### National Inventories

**TSCA** Complies  
**DSL/NDSL** Complies

**TSCA**- United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL**- Canadian Domestic Substances List/Non-Domestic Substances List

### International Inventories

**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**TCSI** Complies  
**AICS** Complies  
**NZIoC** Complies

**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

**TCSI**- Taiwan Chemical Substances Inventory

**AICS**- Australian Inventory of Chemical Substances

**NZIoC**- New Zealand Inventory of Chemicals

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Nitrapyrin (CAS #: 1929-82-4)	1.0

#### SARA 311/312 Hazard Categories

**Acute health hazard** No  
**Chronic Health Hazard** No  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Product Code(s) 253334  
 Issue Date 13-Sep-2016  
 Version 2

Product Name Nitrification Inhibitor Formula 2533  
 Revision Date 13-Sep-2016  
 Page 15 / 16

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Nitrapyrin (CAS #: 1929-82-4)	Carcinogen Developmental

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium sulfate 7757-82-6	-	X	X
Nitrapyrin 1929-82-4	X	X	X

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

#### NFPA and HMIS Classifications

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection - X - See section 8 for more information

#### Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH *Immediately Dangerous to Life or Health*  
 ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)  
 NDF *no data*

#### Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

**Product Code(s)** 253334  
**Issue Date** 13-Sep-2016  
**Version** 2

**Product Name** Nitrification Inhibitor Formula 2533  
**Revision Date** 13-Sep-2016  
**Page** 16 / 16

**Prepared By** Hach Product Compliance Department

**Issue Date** 13-Sep-2016

**Revision Date** 13-Sep-2016

**Revision Note** None

**Disclaimer**

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

HACH COMPANY©2016

**End of Safety Data Sheet**