



Be Right™

# SAFETY DATA SHEET

Issue Date 05-Mar-2018

Revision Date 05-Mar-2018

Version 1.1

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## 1. IDENTIFICATION

### Product identifier

**Product Name** N-(1-Naphthyl)ethylenediamine Dihydrochloride

### Other means of identification

**Product Code(s)** 1124224

**Safety data sheet number** M01122

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

**Recommended Use** Laboratory Use.

**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 +1(970) 669-3050

#### **Emergency telephone number**

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

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

Not applicable

#### **Label elements**

**Signal word** - Warning



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### Hazard statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

### Precautionary statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 - Use only outdoors or in a well-ventilated area  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/ container to an approved waste disposal plant

### Other Hazards Known

Not applicable

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

**Chemical Name** N-(1-Naphthyl)ethylenediamine Dihydrochloride  
**Chemical Family** Aromatic Halogenated Amines.  
**Formula** C<sub>12</sub>H<sub>14</sub>N<sub>2</sub> • 2ClH  
**CAS No** 1465-25-4

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
N-(1-Naphthyl)ethylenediamine dihydrochloride	1465-25-4	100%	-

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing.

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

<b>Symptoms</b>	Burning sensation.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable Extinguishing Media</b>	Caution: Use of water spray when fighting fire may be inefficient.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous combustion products</b>	Nitrogen oxides. Hydrogen chloride.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>U.S. Notice</b>	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.
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##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.
<b>Other Information</b>	Refer to protective measures listed in Sections 7 and 8.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**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

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

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

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hand Protection** Wear suitable gloves. Impervious gloves.

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**General Hygiene Considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not

allow into any sewer, on the ground or into any body of water.

**Thermal hazards** None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Color</b>	Off-white
<b>Appearance</b>	powder	<b>Odor threshold</b>	No data available
<b>Odor</b>	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	259.20 g/mole	
<b>pH</b>	No data available	
<b>Melting point/freezing point</b>	188 °C / 370 °F	
<b>Boiling point / boiling range</b>	No data available	
<b>Evaporation rate</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable at 20 °C / 68 °F	
<b>Vapor density (air = 1)</b>	Not applicable	
<b>Specific gravity (water = 1 / air = 1)</b>	No data available	
<b>Partition Coefficient (n-octanol/water)</b>	log K <sub>ow</sub> = -0.45	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™
<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>
Slightly soluble	> 0.1 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>
Ethyl alcohol	Soluble	> 1000 mg/L	25 °C / 77 °F
Dilute Hydrochloric Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Ethyl alcohol	Slightly soluble	> 0.1 mg/L	25 °C / 77 °F

### Other Information

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#### Metal Corrosivity

**Steel Corrosion Rate** Not applicable  
**Aluminum Corrosion Rate** Not applicable

#### Volatile Organic Compounds (VOC) Content

This Product is by Weight 100% an Individual Pure Chemical Substance

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
N-(1-Naphthyl)ethylenediamine dihydrochloride	1465-25-4	No data available	-

#### Explosive properties

**Upper explosion limit** No data available  
**Lower explosion limit** No data available

#### Flammable properties

**Flash point** Not applicable

#### Flammability Limit in Air

**Upper flammability limit:** No data available  
**Lower flammability limit:** No data available

#### Oxidizing properties

No data available.

#### Bulk density

No data available

#### Particle Size

No information available

#### Particle Size Distribution

No information available

## 10. STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

#### Chemical stability

##### Stability

Stable under normal conditions.

#### Explosion data

**Sensitivity to Mechanical Impact** None  
**Sensitivity to Static Discharge** None.

#### Possibility of Hazardous Reactions

**Possibility of Hazardous Reactions** None under normal processing.

#### Hazardous polymerization

None under normal processing.

#### Conditions to avoid

##### Conditions to avoid

None known based on information supplied.

#### Incompatible materials

##### Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous Decomposition Products**

Nitrogen oxides. Hydrogen chloride. Hydrogen chloride.

**11. TOXICOLOGICAL INFORMATION**

**Information on Likely Routes of Exposure**

**Product Information**

- Inhalation** May cause irritation of respiratory tract.
- Eye contact** Causes serious eye irritation.
- Skin contact** Causes skin irritation.
- Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Aggravated Medical Conditions** Skin disorders. Eye disorders. Respiratory disorders.

**Toxicologically synergistic products** None known.

**Toxicokinetics, metabolism and distribution** This Product is by Weight 100% an Individual Pure Chemical Substance.

**Product Acute Toxicity Data**

This Product is by Weight 100% an Individual Pure Chemical Substance

**Oral Exposure Route**

If available, see ingredient data below

**Dermal Exposure Route**

If available, see ingredient data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below

**Inhalation (Gas) Exposure Route**

If available, see ingredient data below

**Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

**Acute Toxicity Estimations (ATE)**

Not applicable

<b>ATEmix (oral)</b>	No information available
<b>ATEmix (dermal)</b>	No information available
<b>ATEmix (inhalation-dust/mist)</b>	No information available
<b>ATEmix (inhalation-vapor)</b>	No information available
<b>ATEmix (inhalation-gas)</b>	No information available

**Ingredient Acute Toxicity Data**

**Oral Exposure Route**

If available, see data below

**Dermal Exposure Route**

If available, see data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see data below

**Inhalation (Vapor) Exposure Route**

If available, see data below

**Inhalation (Gas) Exposure Route**

If available, see data below

**Product Specific Target Organ Toxicity Single Exposure Data**

**Oral Exposure Route**

If available, see ingredient data below

**Dermal Exposure Route**

If available, see ingredient data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below

**Inhalation (Gas) Exposure Route**

If available, see ingredient data below

**Ingredient Specific Target Organ Toxicity Single Exposure Data**

**Oral Exposure Route**

If available, see data below

**Dermal Exposure Route**

If available, see data below

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**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

If available, see data below  
If available, see data below  
If available, see data below

**Aspiration toxicity**

If available, see data below

**Kinematic viscosity**

Not applicable

**Product Skin Corrosion/Irritation Data**

This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

**Ingredient Skin Corrosion/Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
N-(1-Naphthyl)ethyle nediamine dihydrochloride (100%) CAS#: 1465-25-4	None reported	Guinea pig	None reported	None reported	Skin irritant	ERMA (New Zealands Environmental Risk Management Authority)

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

This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

**Ingredient Eye Damage/Eye Irritation Data**

No data available

**Sensitization Information**

**Product Sensitization Data**

**Skin Sensitization Exposure Route**

This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

**Respiratory Sensitization Exposure Route**

This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

**Ingredient Sensitization Data**

**Skin Sensitization Exposure Route**

If available, see data below.

**Respiratory Sensitization Exposure Route**

If available, see data below.

**Chronic Toxicity Information**

**Product Specific Target Organ Toxicity Repeat Dose Data**

**Oral Exposure Route**

If available, see ingredient data below.

**Dermal Exposure Route**

If available, see ingredient data below.

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below.

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below.

**Inhalation (Gas) Exposure Route**

If available, see ingredient data below.

**Ingredient Specific Target Organ Toxicity Repeat Exposure Data**

**Oral Exposure Route**

If available, see data below

**Dermal Exposure Route**

If available, see data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see data below

**Inhalation (Vapor) Exposure Route**

If available, see data below

**Inhalation (Gas) Exposure Route**

If available, see data below

**Product Carcinogenicity Data**

**Oral Exposure Route**

If available, see ingredient data below

**Dermal Exposure Route**

If available, see ingredient data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below



**Inhalation (Gas) Exposure Route**

If available, see ingredient data below

**Ingredient Carcinogenicity Data**

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
N-(1-Naphthyl)ethylenediamine dihydrochloride	1465-25-4	-	-	-	-

**Legend**

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

**Oral Exposure Route**

If available, see data below

**Dermal Exposure Route**

If available, see data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see data below

**Inhalation (Vapor) Exposure Route**

If available, see data below

**Inhalation (Gas) Exposure Route**

If available, see data below

**Product Germ Cell Mutagenicity *invitro* Data**

This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

**Ingredient Germ Cell Mutagenicity *invitro* Data**

If available, see data below

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
N-(1-Naphthyl)ethylenediamine dihydrochloride (100%) CAS#: 1465-25-4	Mutation in microorganisms	<i>Salmonella typhimurium</i>	0.8 mg/plate	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

**Product Germ Cell Mutagenicity *invivo* Data**

**Oral Exposure Route**

If available, see ingredient data below

**Dermal Exposure Route**

If available, see ingredient data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below

**Inhalation (Gas) Exposure Route**

If available, see ingredient data below

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

**Oral Exposure Route**

If available, see data below

**Dermal Exposure Route**

If available, see data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see data below

**Inhalation (Vapor) Exposure Route**

If available, see data below

**Inhalation (Gas) Exposure Route**

If available, see data below

**Product Reproductive Toxicity Data**

**Oral Exposure Route**

If available, see ingredient data below

**Dermal Exposure Route**

If available, see ingredient data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see ingredient data below

**Inhalation (Vapor) Exposure Route**

If available, see ingredient data below

**Inhalation (Gas) Exposure Route**

If available, see ingredient data below

**Ingredient Reproductive Toxicity Data**

**Oral Exposure Route**

If available, see data below

**Inhalation (Dust/Mist) Exposure Route**

If available, see data below

**Inhalation (Vapor) Exposure Route**

If available, see data below

**Inhalation (Gas) Exposure Route**

If available, see data below

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Not considered to be harmful to aquatic life

**Product Ecological Data** This Product is by Weight 100% an Individual Pure Chemical Substance

**Aquatic toxicity**

**Fish** If available, see ingredient data below  
**Crustacea** If available, see ingredient data below  
**Algae** If available, see ingredient data below

**Ingredient Ecological Data**

**Aquatic toxicity**

**Fish** If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
N-(1-Naphthyl)ethyle nediamine dihydrochloride (100%) CAS#: 1465-25-4	96 hours	None reported	LC <sub>50</sub>	33673 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

**Crustacea** If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
N-(1-Naphthyl)ethyle nediamine dihydrochloride (100%) CAS#: 1465-25-4	48 Hours	None reported	LC <sub>50</sub>	15251 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

**Algae** If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
N-(1-Naphthyl)ethyle nediamine dihydrochloride (100%) CAS#: 1465-25-4	96 hours	None reported	EC <sub>50</sub>	4461 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

**Other Information**

**Persistence and degradability**

**Product Biodegradability Data**  
 This Product is by Weight 100% an Individual Pure Chemical Substance.

**Ingredient Biodegradability Data**

Chemical name	Test method	Biodegradation	Exposure time	Results
N-(1-Naphthyl)ethyle nediamine dihydrochloride (100%) CAS#: 1465-25-4	OECD Test No. 303: Simulation Test - Aerobic Sewage Treatment -- A: Activated Sludge Units; B: Biofilms	None reported	None reported	Not readily biodegradable

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### Bioaccumulation

#### Product Bioaccumulation Data

This Product is by Weight 100% an Individual Pure Chemical Substance.

**Partition Coefficient (n-octanol/water)**  $\log K_{ow} = -0.45$

#### Ingredient Bioaccumulation Data

### Mobility

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

### Water solubility

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Slightly soluble	> 0.1 mg/L	25 °C / 77 °F

#### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**Special instructions for disposal** Mix with combustible solvent. Incinerate material at an E.P.A. approved hazardous waste facility.

## 14. TRANSPORT INFORMATION

**U.S. DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**Note:** No special precautions necessary.

### Additional information

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

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**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** Does not comply  
**IECSC** Complies  
**KECL** Does not comply  
**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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

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

**U.S. EPA Label Information**

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

**Special Comments**

None

**Additional information**

**Global Automotive Declarable Substance List (GADSL)**

Not applicable

**NFPA and HMIS Classifications**

<b>NFPA</b>	<b>Health hazards - 2</b>	<b>Flammability - 0</b>	<b>Instability - 0</b>	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards - 2</b>	<b>Flammability - 0</b>	<b>Physical Hazards - 0</b>	<b>Personal protection - X</b> - See section 8 for more information

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

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

**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		

**Prepared By** Hach Product Compliance Department

**Issue Date** 05-Mar-2018

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**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.

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**End of Safety Data Sheet**