



**Be Right™**

# SAFETY DATA SHEET

Issue Date 20-Jun-2016

Revision Date 11-Jul-2016

Version 3

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name** DPD Total Chlorine Reagent  
**Safety data sheet number** M00110

### Other means of identification

**Product Code(s)** 1406428  
**Component of Kits or Sets**

### Manufacturer Address

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

### Emergency Telephone

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

### Product Information

**Chemical Name** Not applicable  
**Formula** Not applicable  
**CAS No** Not applicable  
**Alternate CAS Number** Not applicable

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

|                                   |             |
|-----------------------------------|-------------|
| Acute toxicity - Oral             | Category 5  |
| Skin corrosion/irritation         | Category 2  |
| Serious eye damage/eye irritation | Category 2A |

### Label elements



### Signal word - Warning

### Hazard statements

H303 - May be harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation

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#### **Precautionary statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P312 - Call a POISON CENTER or 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  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substance**

Not applicable

#### **Mixture**

| <b>Chemical Name</b>                                         | <b>CAS No</b> | <b>EC No</b> | <b>Percent Range</b> |
|--------------------------------------------------------------|---------------|--------------|----------------------|
| Carboxylate Salt                                             | -             | -            | 40 - 50%             |
| Sodium Phosphate, Dibasic                                    | 7558-79-4     | 231-448-7    | 20 - 30%             |
| Potassium Iodide                                             | 7681-11-0     | 231-659-4    | 20 - 30%             |
| Salt of<br>N,N-Diethyl-p-Phenylenediamine                    | -             | -            | 0 - 10%              |
| Ethylenediaminetetraacetic Acid,<br>Disodium Salt, Dihydrate | 6381-92-6     | -            | 0 - 10%              |

### **4. FIRST AID MEASURES**

#### **Description of first aid measures**

|                                           |                                                                                                                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).                                          |
| <b>Eye contact</b>                        | 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. |
| <b>Skin contact</b>                       | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.                       |
| <b>Inhalation</b>                         | IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.                                                       |
| <b>Ingestion</b>                          | IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.                                                                                                       |
| <b>Self-protection of the first aider</b> | 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**

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### **Fire-fighting Measures**

#### **Flammable properties**

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

#### **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.

#### **Specific hazards arising from the chemical**

None reported.

**Hazardous combustion products** Carbon monoxide, carbon dioxide, iodine compounds, Phosphorus oxides, potassium oxides, sodium monoxide, Nitrogen oxides.

#### **Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

## **6. ACCIDENTAL RELEASE MEASURES**

|                                        |                                                                                                                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>            | Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.                                 |
| <b>Environmental precautions</b>       | Avoid release to the environment. See Section 12 for additional ecological information.                                                                                                  |
| <b>Methods for containment</b>         | Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.                                                                                     |
| <b>Methods for cleaning up</b>         | 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. |
| <b>Prevention of secondary hazards</b> | Clean contaminated objects and areas thoroughly observing environmental regulations.                                                                                                     |

## **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**

|                               |                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions</b>     | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. |
| <b>Flammability class</b>     | Not applicable                                                                                                |
| <b>Incompatible materials</b> | Incompatible with: Oxidizers.                                                                                 |

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**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    | OSHA PEL | ACGIH TLV | NIOSH IDLH | Indonesia | Indonesia STELs | Philippines | Philippines Carcinogen | India |
|------------------|----------|-----------|------------|-----------|-----------------|-------------|------------------------|-------|
| Potassium Iodide | NDF      | TWA: 0.01 | NDF        | NDF       | NDF             | NDF         | NDF                    | NDF   |

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|                               |  |     |  |  |  |  |  |  |
|-------------------------------|--|-----|--|--|--|--|--|--|
| (20 - 30%)<br>CAS#: 7681-11-0 |  | ppm |  |  |  |  |  |  |
|-------------------------------|--|-----|--|--|--|--|--|--|

|                                             |                                                                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Legend</b>                               | See section 16 for terms and abbreviations                                                                                |
| <b>Engineering Controls</b>                 | Showers. Eyewash stations. Ventilation systems.                                                                           |
| <b><u>Personal Protective Equipment</u></b> |                                                                                                                           |
| <b>Eyeface protection</b>                   | Avoid contact with eyes. Wear tight sealing safety goggles and/or face protection shield.                                 |
| <b>Skin and body protection</b>             | Wear protective gloves and protective clothing.                                                                           |
| <b>Respiratory protection</b>               | Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection. |

#### **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.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

|                    |          |                                          |                     |
|--------------------|----------|------------------------------------------|---------------------|
| Physical state     |          | Solid                                    |                     |
| Gas Under Pressure |          | Not classified according to GHS criteria |                     |
| Appearance         | Powder   | Color                                    | White to light pink |
| Odor               | Odorless | Odor threshold                           | No data available   |

| <b><u>Property</u></b>                                 | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|--------------------------------------------------------|----------------------|--------------------------------|
| <b>Molecular weight</b>                                | No data available    |                                |
| <b>pH</b>                                              | No data available    |                                |
| <b>Melting point/freezing point</b>                    | 145 °C / 293 °F      |                                |
| <b>Boiling point / boiling range</b>                   |                      |                                |
| <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>          | 1.79                 |                                |
| <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    |                                |

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**Dynamic viscosity** Not applicable

**Kinematic viscosity** 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> |
|----------------------|----------------------------------|-------------------|-------------------------------|
| None reported        | No information available         | No data available | No information available      |

**Other Information**

**Metal Corrosivity** Not classified as corrosive to metal according to GHS criteria

**Steel Corrosion Rate** 0.97 mm/yr / 0.04 in/yr

**Aluminum Corrosion Rate** 0.15 mm/yr / 0.01 in/yr

**Volatile Organic Compounds (VOC) Content** Not applicable.

**Bulk density** No data available

**Explosive properties** Not classified according to GHS criteria.

**Explosion data** No data available

**Upper explosion limit** No data available

**Lower explosion limit** No data available

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

**Flammability Limit in Air**

**Upper flammability limit:** No data available

**Lower flammability limit:** No data available

**Flash point** Not applicable

**Method** No information available

**Oxidizing properties** Not classified according to GHS criteria.

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

**Stability** Stable under normal conditions.

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**Special dangers of the product** None reported.

**Conditions to avoid** Exposure to light. Excess moisture. Extreme temperatures. Poor Ventilation.

**Incompatible materials** Incompatible with:. Oxidizers.

**Hazardous Decomposition Products** Heating to decomposition releases toxic and/or corrosive fumes of:. Carbon dioxide. Carbon Monoxide. iodine compounds. Phosphorus oxides. potassium oxide. Nitrogen oxides.

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

**Explosive properties**

Not classified according to GHS criteria.

**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

**Information on Likely Routes of Exposure**

|                                                    |                                                                                     |
|----------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Product Information</b>                         | May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. |
| <b>Inhalation</b>                                  | No known effect based on information supplied.                                      |
| <b>Eye contact</b>                                 | Severely irritating to eyes.                                                        |
| <b>Skin contact</b>                                | Causes skin irritation.                                                             |
| <b>Ingestion</b>                                   | May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.    |
| <b>Aggravated Medical Conditions</b>               | Skin disorders. Eye disorders.                                                      |
| <b>Toxicologically synergistic products</b>        | None known.                                                                         |
| <b>Toxicokinetics, metabolism and distribution</b> | See ingredients information below.                                                  |

| <b>Chemical Name</b>                                                                      | <b>Toxicokinetics, metabolism and distribution</b>                                          |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Sodium Phosphate, Dibasic<br>(20 - 30%)<br>CAS#: 7558-79-4                                | Phosphates are widely utilized by cells for metabolism of proteins, fats and carbohydrates. |
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0                                         | May cross placenta and be excreted in breast milk. May react synergistically with mercury.  |
| Ethylenediaminetetraacetic Acid, Disodium Salt, Dihydrate<br>(0 - 10%)<br>CAS#: 6381-92-6 | EDTA and related compounds are poorly absorbed by the digestive system.                     |

**Product Acute Toxicity Data**

Test data reported below

**Oral Exposure Route**

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| <u>Endpoint type</u>    | <u>Reported dose</u> | <u>Toxicological effects</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <u>Key literature references and sources for data</u> |
|-------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Rat<br>LD <sub>50</sub> | 4700 mg/kg           | <b>Behavioral</b><br>Flaccid muscle tone<br>Lethargy<br>Prostration<br><b>Eye</b><br>Chromodacryorrhea<br>Ptosis<br><b>Gastrointestinal</b><br>Abnormalities of the gastrointestinal tract<br>Diarrhea<br><b>Liver</b><br>Abnormalities of the liver<br><b>Lungs, Thorax, or Respiration</b><br>Abnormalities of the lungs<br>Dyspnea<br>Red or brown staining of the nose/mouth area<br><b>Nutritional and Gross Metabolic</b><br>Soiling of the anogenital area<br>Wetness of the anogenital area<br><b>Reproductive</b><br><b>Skin and Appendages</b><br>Piloerection | Outside testing                                       |

**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

#### Ingredient Acute Toxicity Data

##### Oral Exposure Route

| <u>Chemical Name</u>                                                  | <u>Endpoint type</u>      | <u>Reported dose</u> | <u>Exposure time</u> | <u>Toxicological effects</u> | <u>Key literature references and sources for data</u> |
|-----------------------------------------------------------------------|---------------------------|----------------------|----------------------|------------------------------|-------------------------------------------------------|
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0                     | Human<br>LD <sub>50</sub> | >= 2500 mg/kg        | None reported        | None reported                | Vendor SDS                                            |
| Salt of<br>N,N-Diethyl-p-Phenyl<br>enediamine<br>(0 - 10%)<br>CAS#: - | Rat<br>LD <sub>50</sub>   | 695 mg/kg            | None reported        | None reported                | No information available                              |

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|                                                                                        |                            |                      |                      |                              |                                                          |
|----------------------------------------------------------------------------------------|----------------------------|----------------------|----------------------|------------------------------|----------------------------------------------------------|
| Ethylenediaminetetraacetic Acid, Disodium Salt, Dihydrate (0 - 10%)<br>CAS#: 6381-92-6 | Rat<br>LD <sub>50</sub>    | 2000 mg/kg           | None reported        | None reported                | RTECS (Registry of Toxic Effects of Chemical Substances) |
| <b>Chemical Name</b>                                                                   | <b>Endpoint type</b>       | <b>Reported dose</b> | <b>Exposure time</b> | <b>Toxicological effects</b> | <b>Key literature references and sources for data</b>    |
| Potassium Iodide (20 - 30%)<br>CAS#: 7681-11-0                                         | Rat<br>LD <sub>50</sub>    | 2779 mg/kg           | None reported        | None reported                | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Salt of N,N-Diethyl-p-Phenyl enediamine (0 - 10%)<br>CAS#: -                           | Rat<br>LD <sub>50</sub>    | 970 mg/kg            | None reported        | None reported                | No information available                                 |
| Ethylenediaminetetraacetic Acid, Disodium Salt, Dihydrate (0 - 10%)<br>CAS#: 6381-92-6 | Rabbit<br>LD <sub>50</sub> | 2300 mg/kg           | None reported        | None reported                | RTECS (Registry of Toxic Effects of Chemical Substances) |

**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

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

| Chemical Name                                           | Test method          | Species | Reported dose | Exposure time | Results       | Key literature references and sources for data           |
|---------------------------------------------------------|----------------------|---------|---------------|---------------|---------------|----------------------------------------------------------|
| Sodium Phosphate, Dibasic (20 - 30%)<br>CAS#: 7558-79-4 | Standard Draize Test | Rabbit  | 500 mg        | 24 hours      | Skin irritant | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Potassium Iodide (20 - 30%)<br>CAS#: 7681-11-0          | Standard Draize Test | Rabbit  | None reported | None reported | Skin irritant | No information available                                 |

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

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

| Chemical Name                                           | Test method          | Species | Reported dose | Exposure time | Results      | Key literature references and sources for data           |
|---------------------------------------------------------|----------------------|---------|---------------|---------------|--------------|----------------------------------------------------------|
| Sodium Phosphate, Dibasic (20 - 30%)<br>CAS#: 7558-79-4 | Standard Draize Test | Rabbit  | 500 mg        | 24 hours      | Eye irritant | RTECS (Registry of Toxic Effects of Chemical Substances) |

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|                                                   |               |        |                  |                  |              |                                             |
|---------------------------------------------------|---------------|--------|------------------|------------------|--------------|---------------------------------------------|
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0 | None reported | Rabbit | None<br>reported | None<br>reported | Eye irritant | HSDB (Hazardous<br>Substances Data<br>Bank) |
|---------------------------------------------------|---------------|--------|------------------|------------------|--------------|---------------------------------------------|

### 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.

**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** No data available

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

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

| Chemical Name                                                   | CAS No    | ACGIH | IARC | NTP | OSHA |
|-----------------------------------------------------------------|-----------|-------|------|-----|------|
| Carboxylate Salt                                                | -         | -     | -    | -   | -    |
| Sodium Phosphate,<br>Dibasic                                    | 7558-79-4 | -     | -    | -   | -    |
| Potassium Iodide                                                | 7681-11-0 | -     | -    | -   | -    |
| Salt of<br>N,N-Diethyl-p-Phenylenedi<br>amine                   | -         | -     | -    | -   | -    |
| Ethylenediaminetetraacetic<br>Acid, Disodium Salt,<br>Dihydrate | 6381-92-6 | -     | -    | -   | -    |

### Legend

|                                                                   |                |
|-------------------------------------------------------------------|----------------|
| ACGIH (American Conference of Governmental Industrial Hygienists) | Does not apply |
| IARC (International Agency for Research on Cancer)                | Does not apply |

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|                                                                                           |                |
|-------------------------------------------------------------------------------------------|----------------|
| <b>NTP (National Toxicology Program)</b>                                                  | Does not apply |
| <b>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</b> | X - Present    |

**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

**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**

Toxicological data for ingredients is not indicative of likely harm.

**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

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**Inhalation (Vapor) Exposure Route**

No data available

**Inhalation (Gas) Exposure Route**

No data available

**Ingredient Reproductive Toxicity Data**

**Oral Exposure Route**

| <b>Chemical Name</b>                              | <b>Endpoint type</b>      | <b>Reported dose</b> | <b>Exposure time</b> | <b>Toxicological effects</b>                                                                                                                   | <b>Key literature references and sources for data</b>    |
|---------------------------------------------------|---------------------------|----------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0 | Human<br>TD <sub>Lo</sub> | 2700 mg/kg           | 39 weeks             | <b>Specific Developmental Abnormalities</b><br>Endocrine System                                                                                | RTECS (Registry of Toxic Effects of Chemical Substances) |
| <b>Chemical Name</b>                              | <b>Endpoint type</b>      | <b>Reported dose</b> | <b>Exposure time</b> | <b>Toxicological effects</b>                                                                                                                   | <b>Key literature references and sources for data</b>    |
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0 | Human<br>TD <sub>Lo</sub> | 3240 mg/kg           | 39 weeks             | <b>Effects on Newborn</b><br>Other neonatal measures or effects<br>Physical<br><b>Specific Developmental Abnormalities</b><br>Endocrine system | RTECS (Registry of Toxic Effects of Chemical Substances) |

**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

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Based on the classification principles, not classified as hazardous to the environment

**Unknown Aquatic Toxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**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**

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| Chemical Name                                                                          | Exposure time | Species                    | Endpoint type    | Reported dose | Key literature references and sources for data |
|----------------------------------------------------------------------------------------|---------------|----------------------------|------------------|---------------|------------------------------------------------|
| Ethylenediaminetetraacetic Acid, Disodium Salt, Dihydrate (0 - 10%)<br>CAS#: 6381-92-6 | 96 hours      | <i>Lepomis macrochirus</i> | LC <sub>50</sub> | 159 mg/L      | Vendor SDS                                     |

**Crustacea**

No data available

**Algae**

| Chemical Name                                                                          | Exposure time | Species       | Endpoint type    | Reported dose | Key literature references and sources for data |
|----------------------------------------------------------------------------------------|---------------|---------------|------------------|---------------|------------------------------------------------|
| Ethylenediaminetetraacetic Acid, Disodium Salt, Dihydrate (0 - 10%)<br>CAS#: 6381-92-6 | 72 Hours      | None reported | EC <sub>50</sub> | 10 mg/L       | Vendor SDS                                     |

**Terrestrial toxicity**

**Soil**

No data available

**Vertebrates**

No data available

**Invertebrates**

No data available

**Other Information**

Canadian Environmental Protection Act (CEPA) - Domestic Substances List (DSL):  
Environmentally Hazardous Substances Categorizations

**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**

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| Chemical Name                                                                                | Partition Coefficient<br>(n-octanol/water) | Method                   |
|----------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------|
| Salt of N,N-Diethyl-p-Phenylenediamine<br>(0 - 10%)<br>CAS#: -                               | Partition coefficient                      | No information available |
| Ethylenediaminetetraacetic Acid, Disodium Salt,<br>Dihydrate<br>(0 - 10%)<br>CAS#: 6381-92-6 | $\log K_{ow} < 0$                          | 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                   |
|----------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------|
| Ethylenediaminetetraacetic Acid, Disodium Salt,<br>Dihydrate<br>(0 - 10%)<br>CAS#: 6381-92-6 | $\log K_{oc} < 0$                               | No information available |

#### **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**

| Chemical Name                                                                                | Water solubility classification | Water solubility | Water solubility temperature °C | Water solubility temperature °F |
|----------------------------------------------------------------------------------------------|---------------------------------|------------------|---------------------------------|---------------------------------|
| Carboxylate Salt<br>(40 - 50%)<br>CAS#: -                                                    | Soluble                         | > 1000 mg/L      | 25 °C                           | 77 °F                           |
| Sodium Phosphate, Dibasic<br>(20 - 30%)<br>CAS#: 7558-79-4                                   | Completely soluble              | 118000 mg/L      | 20 °C                           | 68 °F                           |
| Potassium Iodide<br>(20 - 30%)<br>CAS#: 7681-11-0                                            | Completely soluble              | 1400000 mg/L     | 20 °C                           | 68 °F                           |
| Salt of N,N-Diethyl-p-Phenylenediamine<br>(0 - 10%)<br>CAS#: -                               | Completely soluble              | > 10000 mg/L     | 25 °C                           | 77 °F                           |
| Ethylenediaminetetraacetic Acid, Disodium Salt,<br>Dihydrate<br>(0 - 10%)<br>CAS#: 6381-92-6 | Completely soluble              | 100000 mg/L      | 20 °C                           | 68 °F                           |

#### **Other adverse effects**

No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

|                                            |                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal of wastes</b>                  | Disposal should be in accordance with applicable regional, national and local laws and regulations.                                                                                                                                                                                                                                                                                      |
| <b>Contaminated packaging</b>              | Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.                                                                                                                                                                                                                                                              |
| <b>Special instructions for disposal</b>   | Dilute to 3 to 5 times the volume with cold water. If permitted by regulation, 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. Otherwise, Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article. |
| <b>Waste from residues/unused products</b> | Disposal should be in accordance with applicable regional, national and local laws and regulations.                                                                                                                                                                                                                                                                                      |
| <b>Contaminated packaging</b>              | Disposal should be in accordance with applicable regional, national and local laws and regulations.                                                                                                                                                                                                                                                                                      |

### 14. TRANSPORT INFORMATION

|                    |               |
|--------------------|---------------|
| <b><u>IMDG</u></b> | Not regulated |
| <b><u>IATA</u></b> | Not regulated |
| <b><u>DOT</u></b>  | Not regulated |
| <b><u>TDG</u></b>  | Not regulated |

### 15. REGULATORY INFORMATION

#### International Inventories

|                      |                 |
|----------------------|-----------------|
| <b>TSCA</b>          | Complies        |
| <b>DSL/NDSL</b>      | Complies        |
| <b>INSQ</b>          | Does not comply |
| <b>EINECS/ELINCS</b> | Complies        |
| <b>ENCS</b>          | Complies        |
| <b>IECSC</b>         | Complies        |
| <b>KECL</b>          | Complies        |
| <b>PICCS</b>         | Complies        |
| <b>TCSI</b>          | Complies        |
| <b>AICS</b>          | Complies        |
| <b>NZIoC</b>         | Complies        |

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**INSQ** - National Inventory of Chemical Substances in Mexico

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

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**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

**Wastes Management** Dispose of in accordance with federal, state and local regulations

**Basel Convention Codes**

| Chemical Name                                                | CAS No    | ANNEX I | ANNEX III |
|--------------------------------------------------------------|-----------|---------|-----------|
| Carboxylate Salt                                             | -         | -       | -         |
| Sodium Phosphate, Dibasic                                    | 7558-79-4 | -       | -         |
| Potassium Iodide                                             | 7681-11-0 | -       | -         |
| Salt of<br>N,N-Diethyl-p-Phenylenediamine                    | -         | -       | -         |
| Ethylenediaminetetraacetic Acid,<br>Disodium Salt, Dihydrate | 6381-92-6 | -       | -         |

**16. OTHER 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)                                                                                                                                                                                                                            |
| 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 i |
| SKN* | Skin designation            | SKN+    | Skin sensitization                                                                                                                                                                                                                                          |
| RSP+ | Respiratory sensitization   | **      | Hazard Designation                                                                                                                                                                                                                                          |
| C    | Carcinogen                  | R       | Reproductive toxicant                                                                                                                                                                                                                                       |
| M    | mutagen                     |         |                                                                                                                                                                                                                                                             |

**Prepared By** Hach Product Compliance Department

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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.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO**

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**WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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**End of Safety Data Sheet**