

SAFETY DATA SHEET

| Issue Date 20-Jun-2016 | Revision Date 10-Aug-2016 | Version 4 | Page 1 / 17 |
|--|---|--|---|
| | 1. IDENTIFICATIO | ON | |
| <u>Product identifier</u> Product Name | DPD Total Chlorine Reagent | | |
| Other means of identification Product Code(s) 2105669 | | | |
| Safety data sheet number | M00110 | | |
| Component of Kits or Sets | 001-H01040.88; 001-H11782.88; 2 2508100; 2508200; 2508300; 2508 251234; 251234K; 251235; 251235 251238K; 251239; 251239K; 25124 2681300; 2688800; 2688800K; 268 2690800; 2690900; 2691100; 2823 2922400K; 2922401; 2922401K; 29 2922600K; 2922601; 2922601K; 29 2991200; 400-P1350.88; 4670000; 5870000.L2; 5870000.L3; 5870000 L2386CA; PCIICHLOR; PCIICHLOR | 400; 2508500; 251231; 251231K K; 251236; 251236K; 251237; 25 2; 251242K; 25127000; 2512700 9400; 2689800; 2690000; 26902 500; 2882200; 2882200RGT; 28 922500; 2922500K; 2922501; 292 923200; 2923300; 2955100; 2955 4670001; 5440015; 5440016; 58 -N; 5870000Q; 5870000RGT; 58 | 2; 251232; 251232K; 51237K; 251238; 00K; 2590100; 200; 2690400; 2690600; 91400; 2922400; 22501K; 2922600; 5200; 2991100; 570000; 5870000.L1; |
| Recommended use of the che | mical and restrictions on use | | |
| Recommended Use | Laboratory reagent. Indicator for tot | al chlorine. | |
| Uses advised against Restrictions on use | None. None. | | |
| Details of the supplier of the s | | | |
| Manufacturer Address Hach Company P.O.Box 389 Loveland, CO 805 (970) 669-3050 | 539 USA | | |
| Emergency telephone numbe (303) 623-5716 - 24 Hour Servic | <u>r</u> ce (515)232-2533 - 8am - 4pm CST | | |
| Product Information | | | |
| Chemical Name | Not applicable | | |
| Formula CAS No | Not applicable Not applicable | | |
| Alternate CAS Number | Not applicable | | |
| NIOSH (RTECS) Number | None reported | | |

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

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

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| Skin corrosion/irritation | Category 2 |
|-----------------------------------|-------------|
| Serious eye damage/eye irritation | Category 2A |

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Signal word - Warning



<u>Hazard statements</u> H315 - Causes skin irritation H319 - Causes serious eye irritation

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

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

Other Information

May be harmful in contact with skin

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 phosphate dibasic | 7558-79-4 | 10 - 30 | - |
| Potassium iodide (KI) | 7681-11-0 | 10 - 30 | - |

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 effe | cts, 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

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

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 |

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|--|--|
| | 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 e | quipment 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 containm | ent 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 Numb | 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, includ | ing 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 |
| Incompatible materials | Oxidizers. |
| 8. EX | POSURE 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 |

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 |
|-----------------------|---------------|----------|------------|
| Potassium iodide (KI) | TWA: 0.01 ppm | NDF | NDF |
| 10 - 30 | | | |

| Chemical Name | Alberta OEL | British Columbia OEL | Manitoba OEL | New Brunswick OEL | New Foundland & Labrador OEL |
|----------------------------------|-------------|-------------------------|---------------|----------------------|---------------------------------|
| Potassium iodide (KI) 10 - 30 | NDF | NDF | TWA: 0.01 ppm | NDF | TWA: 0.01 ppm |

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| Chemical Name | Northwest Territories OEL | Nova Scotia OEL | Nunavut OEL | Ontario TWA | Prince Edward Island OEL |
|----------------------------------|------------------------------|-----------------|-------------|---------------|-----------------------------|
| Potassium iodide (KI) 10 - 30 | NDF | TWA: 0.01 ppm | NDF | TWA: 0.01 ppm | TWA: 0.01 ppm |

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 | Avoid contact with eyes. Wear tight sealing safety goggles and/or face protection shield. |
|--------------------------------|---|
| 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical state Solid | | Solid | | | | |
|-------------------------------|----------------------|-------------------|--|----------------|---------------------|--|
| Gas Under Pressure | | Not clas | Not classified according to GHS criteria | | | |
| Appearance | powder | | | Color | White to light pink | |
| Odor | Odorless | | | Odor threshold | No data available | |
| Property | | | <u>Values</u> | | Remarks • Method | |
| Molecular weight | | No data available | | | | |
| рН | | No data available | | | | |
| Melting point/freezing point | | 145 °C / 293 °F | | | | |
| Boiling point / boiling range | | No data available | | | | |
| Evaporation rate | | Not applicable | | | | |
| Vapor pressure | | Not applicable | | | | |
| Vapor density (air = 1) | | Not applicable | | | | |
| Specific gravity (| water = 1 / air = 1) | | 1.79 | | | |

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| Partition Coefficient (n-octanol/water) | No data available |
|--|-------------------|
| Soil Organic Carbon-Water Partition Coefficient | No data available |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Dynamic viscosity | Not applicable |
| Kinematic viscosity | Not applicable |

Solubility(ies)

Water solubility

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

Solubility in other solvents

| Chemical Name | Solubility classification | Solubility | Solubility Temperature | | |
|------------------------------|---------------------------|---|---|--|--|
| None reported | No information available | No data available | No information available | | |
| Other Information | | | | | |
| Metal Corrosivity | | Not classified as corrosive to me | etal 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. | | | |
| | | N 1.7 111 | | | |
| 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 | | | yrophoric, self-heating or emitting water according to GHS criteria. | | |

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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

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

Exposure to light. Excess moisture. Extreme temperatures. Poor Ventilation.

Incompatible materials Oxidizers.

Hazardous Decomposition Products

Carbon dioxide. Carbon monoxide. iodine compounds. Phosphorus oxides. potassium oxide. nitrogen oxides.

Explosive properties

Not classified according to GHS criteria.

Upper explosion limitNo data availableLower explosion limitNo 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

| Product Information | May be harmful if swallowed. Causes skin irritation. Causes |
|--------------------------------------|--|
| | serious eye irritation. |
| Inhalation | No known effect based on information supplied. |
| Eye contact | Severely irritating to eyes. |
| Skin contact | Causes skin irritation. |
| Ingestion | May be harmful if swallowed. Ingestion may cause irritation to |
| | mucous membranes. |
| Aggravated Medical Conditions | Skin disorders. Eye disorders. |
| Toxicologically synergistic products | None known. |

| Toxicokinetics, meta | abolism and distribution | See ingredients information below. |
|---|---|---|
| Chemical Name | Toxicokine | tics, metabolism and distribution |
| Sodium phosphate dibasic (10 - 30) CAS#: 7558-79-4 | Phosphates are widely utilized by cells for | metabolism of proteins, fats and carbohydrates. |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | May cross placenta and be excreted in bre | ast milk. May react synergistically with mercury. |

Product Acute Toxicity Data

Test data reported below

| Endpoint type | Reported dose | Toxicological | Key literature references and sources for data |
|---------------|---------------|----------------------|--|
| Rat | 4700 mg/kg | effects | Outside testing |
| LD50 | | Behavioral | |
| | | Flaccid muscle | |
| | | tone | |
| | | Lethargy | |
| | | Prostration | |
| | | Eye | |
| | | Chromodacryorrhe | |
| | | а | |
| | | Ptosis | |
| | | Gastrointestinal | |
| | | Abnormalities of | |
| | | the gastrointestinal | |
| | | tract | |
| | | Diarrhea | |
| | | Liver | |
| | | Abnormalities of | |
| | | the liver | |
| | | Lungs, Thorax, or | |
| | | Respiration | |
| | | Abnormalities of | |
| | | the lungs | |
| | | Dyspnea | |
| | | Red or brown | |
| | | staining of the | |
| | | nose/mouth area | |
| | | Nutritional and | |
| | | Gross Metabolic | |
| | | Soiling of the | |
| | | anogenital area | |
| | | Wetness of the | |
| | | anogenital area | |
| | | Reproductive | |
| | | Skin and | |
| | | Appendages | |
| | | Piloerection | |

| No data available |
|-------------------|
| No data available |
| No data available |
| No data available |
| |

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

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 phosphate dibasic (10 - 30) CAS#: 7558-79-4 | Rat LD ₅₀ | 17000 mg/kg | None reported | None reported | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Human LD50 | >= 2500 mg/kg | None reported | None reported | Vendor SDS |
| Chemical Name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Rat LD ₅₀ | 2779 mg/kg | None reported | None reported | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Chemical Name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Mouse LDLo | 1862 mg/kg | None reported | Lungs, Thorax, or Respiration Dyspnea | RTECS (Registry of Toxic Effects of Chemical Substances) |

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

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 (10 - 30) CAS#: 7558-79-4 | Standard Draize Test | Rabbit | 500 mg | 24 hours | Skin irritant | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Potassium iodide (KI) (10 - 30) 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 | Standard Draize | Rabbit | 500 mg | 24 hours | Eye irritant | RTECS (Registry of |

No data available

No data available

No data available

No data available

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| dibasic (10 - 30) CAS#: 7558-79-4 | Test | | | | | Toxic Effects of Chemical Substances) |
|---|---------------|--------|------------------|------------------|--------------|---|
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | None reported | Rabbit | None reported | None reported | Eye irritant | HSDB (Hazardous Substances Data 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.

| Chemical Name | Test method | Species | Results | Key literature references and | |
|-----------------------|-------------|---------|---------------------------------------|----------------------------------|--|
| | | | | sources for data | |
| Potassium iodide (KI) | Patch test | Human | Not confirmed to be a skin sensitizer | ERMA (New Zealands Environmental | |
| (10 - 30) | | | | Risk Management Authority) | |
| CAS#: 7681-11-0 | | | | - | |

No data available.

Respiratory Sensitization Exposure Route

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 |
|--------------------------|-----------|-------|------|-----|------|
| Sodium phosphate dibasic | 7558-79-4 | - | - | - | - |
| Potassium iodide (KI) | 7681-11-0 | - | - | - | - |

Legend

| ACGIH (American Conference of Governmental Industrial Hyg | ienists) 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 Administrati Labor) | 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.

| Chemical Name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|------------------------------------|-------------------------|-------------------|------------------|------------------|--|--|
| Potassium iodide (KI) (10 - 30) | Cytogenetic analysis | Rat ascites tumor | 500 mg/kg | None reported | Positive test result for mutagenicity | RTECS (Registry of Toxic Effects of |
| CAS#: 7681-11-0 | | | | | | Chemical Substances) |

| 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 |

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|--|--|
| 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

| Chemical Name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|------------------|------------------|------------------|--|--|
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | | 2700 mg/kg | 39 weeks | Specific Developmental Abnormalities Endocrine System | RTECS (Registry of Toxic Effects of Chemical Substances) |
| Chemical Name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Human TD∟₀ | 3240 mg/kg | 39 weeks | Effects on Newborn Other neonatal measures or effects Physical Specific Developmental Abnormalities Endocrine system | RTECS (Registry of Toxic Effects of Chemical Substances) |

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Product Ecological Data

Aquatic toxicity

Fish

Crustacea

Algae

Terrestrial toxicity

Soil

Vertebrates

Invertebrates

Ingredient Ecological Data

No data available

No data available No data available

No data available

No data available

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Aquatic toxicity

Fish

| Chemical Name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|------------------|---------------------|------------------|---------------|---|
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | 96 hours | Oncorhynchus mykiss | LC50 | 896 mg/L | PEEN (Pan European Ecological Network) |

No data available

Crustacea

Algae

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 | | | | |
|--|------------|------------|-----------------|---|
| Chemical Name | Category | Persistent | Bioaccumulation | Inherently Toxic to Aquatic Organisms |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Inorganics | Yes | No | Yes |

Persistence and degradability

None known.

Product Biodegradability Data No data available.

Ingredient Biodegradability Data

No data available

Bioaccumulation None known.

Product Bioaccumulation DataNo data available.Ingredient Bioaccumulation DataNo data availableAdditional informationNo data availableProduct InformationNo data availablePartition Coefficient (n-octanol/water)No data availableIngredient InformationNo data 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 | |

Additional information

Water solubility

Product Information

| Water solubility classification | Water solubility | Water Solubility Temperature |
|---------------------------------|------------------|------------------------------|
| 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 |
|--|------------------------------------|------------------|------------------------------------|------------------------------------|
| Sodium phosphate dibasic (10 - 30) CAS#: 7558-79-4 | Completely soluble | 118000 mg/L | 20 °C | 68 °F |
| Potassium iodide (KI) (10 - 30) CAS#: 7681-11-0 | Completely soluble | 1400000 mg/L | 20 °C | 68 °F |

Other adverse effects

No information available.

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 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. Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article. |

| | 14. TRANSPORT INFORMATION | | |
|-------|-----------------------------------|--|--|
| DOT | Not regulated | | |
| TDG | Not regulated | | |
| | 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 | |
|----------------------|----------|
| 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 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 | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| 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)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--|--------------------------------|------------------------|------------------------------|-------------------------------|
| Sodium phosphate dibasic 7558-79-4 | 5000 lb | - | - | Х |

<u>CERCLA</u>

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

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|--------------------------|--------------------------|----------------|--------------------------|
| Sodium phosphate dibasic | 5000 lb | - | RQ 5000 lb final RQ |
| 7558-79-4 | | | RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

New Jersey Trade Secret Registry Number 80100131-5001 (Carboxylate Salt) New Jersey Trade Secret Registry Number 80100131-5002 (DPD Salt) New York Trade Secret Registry Number 478 (DPD Salt) New York Trade Secret Registry Number 479 (Carboxylate Salt) This product complies with Pennsylvania Trade Secret Regulations. This product is registered as a trade secret in the state of Illinois. This product is registered as a trade secret in the state of Massachusetts. This product is registered as a trade secret in the state of New York.

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Sodium phosphate dibasic | Х | X | Х |
| 7558-79-4 | | | |

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 - 2 | Flammability - 0 | Instability - 0 | Physical and Chemical Properties - |
|------|--------------------|------------------|----------------------|---------------------------------------|
| HMIS | Health hazards - 2 | 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

Product Name DPD Total Chlorine Reagent Revision Date 10-Aug-2016 Page 17 / 17

| 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* RSP+ C M | Skin designation Respiratory sensi Carcinogen mutagen | tization | SKN+ ** R | Skin sensitization Hazard Designation Reproductive toxicant |
| Prepared By | | Hach Product Compliand | ce Department | |
| Issue Date | | 20-Jun-2016 | | |
| Revision Date | | 10-Aug-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.

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End of Safety Data Sheet