



Be Right™

SAFETY DATA SHEET

Issue Date 28-May-2021

Revision Date 26-Jan-2024

Version 11.7

Page 1 / 14

1. IDENTIFICATION

Product identifier

Product Name DPD Free Chlorine Reagent

Other means of identification

Product Code(s) 2105569

Safety data sheet number M00109

HMRIC # HMIRA Registry Number 9935 Filed 2021-03-29

Recommended use of the chemical and restrictions on use

Recommended Use Water Analysis. Determination of chlorine.

Uses advised against Consumer use.

Restrictions on use Please refer to the product labeling and packaging for information about appropriate use.

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

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 (repeated exposure) | Category 2 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

Warning



Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements

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

P332 + P313 - If skin irritation occurs: Get medical attention

P362 - Take off contaminated clothing and wash before reuse

P280 - Wear protective gloves, protective clothing, eye protection, and 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 attention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical advice/attention if you feel unwell

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

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Family

Mixture.

Chemical nature

No information available.

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No | Percent Range | HMRIC # |
|--|-----------|---------------|---------|
| Carboxylate Salt | - | 60 - 70% | - |
| Phosphoric acid, disodium salt | 7558-79-4 | 30 - 40% | - |
| Salt of N,N-Diethyl-p-Phenylenediamine | - | 1 - 5% | - |
| Disodium EDTA | 139-33-3 | 1 - 5% | - |

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact

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.

| | |
|---|---|
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. |

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

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. |
| Specific hazards arising from the chemical | No information available. |
| Hazardous combustion products | Carbon monoxide, Carbon dioxide. Phosphorus oxides. Nitrogen oxides. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

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.

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

Other Information 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 Take up mechanically, placing in appropriate containers for disposal.

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. Ensure adequate ventilation. 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.

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. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

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. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016. Barrier creams may help to protect the exposed areas of skin.

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. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse.

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

Physical state Solid

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 5 / 14

Appearance powder
Odor Odorless

Color White to light pink
White to brown
Odor threshold No data available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|-------------------------|-------------------------|
| Molecular weight | No data available | |
| pH | 6.35 | 1% @ 20°C |
| Melting point / freezing point | 110 °C / 230 °F | |
| Initial boiling point and boiling range | No data available | |
| Evaporation rate | Not applicable | |
| Vapor pressure | Not applicable | |
| Relative vapor density | No data available | |
| Specific gravity - VALUE 1 | 1.76 | |
| Partition coefficient | log K _{ow} ~ 0 | |
| Soil Organic Carbon-Water Partition Coefficient | log K _{oc} ~ 0 | |
| Autoignition temperature | No data available | |
| Decomposition temperature | 110 °C / 230 °F | |
| 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> |
|--|-------------------------|-------------------------------------|
| Completely soluble | > 10000 mg/L | 25 °C / 77 °F |

Solubility in other solvents

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

Other information

Metal Corrosivity

Steel Corrosion Rate No data available
Aluminum Corrosion Rate No data available

Volatile Organic Compounds (VOC) Content

Not applicable

| <u>Chemical name</u> | <u>CAS No</u> | <u>Volatile organic compounds (VOC) content</u> | <u>CAA (Clean Air Act)</u> |
|---|---------------|---|----------------------------|
| Carboxylate Salt | - | No data available | - |
| Phosphoric acid, disodium salt | 7558-79-4 | No data available | - |
| Salt of N,N-Diethyl-p-Phenylenediamine | - | Not applicable | - |

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 6 / 14

| Chemical name | CAS No | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|---------------|----------|--|---------------------|
| Disodium EDTA | 139-33-3 | 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

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

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

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Phosphorus oxides. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact Irritating to eyes. 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.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|----------------------|---------------|---------------|-----------------------|--|
| Salt of N,N-Diethyl-p-Phenyl enediamine (1 - 5%) CAS#: - | Rat LD ₅₀ | 695 mg/kg | None reported | None reported | Outside testing |
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | Rat LD ₅₀ | 2000 mg/kg | None reported | None reported | RTECS |

Inhalation (Dust/Mist) Exposure Route

Unknown Acute Toxicity

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

Acute Toxicity Estimations (ATE)

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

| | |
|-------------------------------|--------------------------------|
| ATEmix (oral) | No information available mg/kg |
| ATEmix (dermal) | No information available |
| ATEmix (inhalation-dust/mist) | 136.40 mg/l |
| ATEmix (inhalation-vapor) | No information available |
| ATEmix (inhalation-gas) | No information available |

Skin corrosion/irritation

Classification based on data available for ingredients. Irritating to skin.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|----------------------|---------|---------------|---------------|---------------|--|
| Phosphoric acid, disodium salt (30 - 40%) | Standard Draize Test | Rabbit | 500 mg | 24 hours | Skin irritant | RTECS |

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 8 / 14

| | | | | | | |
|---|-------------------------|--------|--------|----------|--|------|
| CAS#: 7558-79-4 | | | | | | |
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | Standard Draize Test | Rabbit | 500 mg | 20 hours | Not corrosive or irritating to skin | ECHA |

Serious eye damage/irritation

Classification based on data available for ingredients. Irritating to eyes.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|-------------------------|---------|---------------|---------------|-------------------|--|
| Phosphoric acid, disodium salt (30 - 40%) CAS#: 7558-79-4 | Standard Draize Test | Rabbit | 500 mg | 24 hours | Eye irritant | RTECS |
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | Standard Draize Test | Rabbit | 50 mg | None reported | Mild eye irritant | ECHA |

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Sensitization Data

No data available.

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure

May cause damage to organs.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

| Chemical name | CAS No | ACGIH | IARC | NTP | OSHA |
|---------------|--------|-------|------|-----|------|
|---------------|--------|-------|------|-----|------|

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 9 / 14

| | | | | | |
|--|-----------|---|---|---|---|
| Carboxylate Salt | - | - | - | - | - |
| Phosphoric acid, disodium salt | 7558-79-4 | - | - | - | - |
| Salt of N,N-Diethyl-p-Phenylenediamine | - | - | - | - | - |
| Disodium EDTA | 139-33-3 | - | - | - | - |

Legend

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

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

No data available.

Substance invitro Data

Test data reported below.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|----------------------|--------------|---------------|---------------|---------------------------------------|--|
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | Cytogenetic analysis | Hamster lung | 200 mg/L | None reported | Positive test result for mutagenicity | RTECS |

Mixture invivo Data

No data available.

Substance invivo Data

No data available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Based on available data, the classification criteria are not met.

Unknown aquatic toxicity

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

Mixture

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

Test data reported below.

Fish

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|----------------------------|------------------|---------------|--|
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | 96 hours | <i>Lepomis macrochirus</i> | LC ₅₀ | 159 mg/L | Vendor SDS |

Crustacea

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|----------------------|------------------|---------------|--|
| Salt of N,N-Diethyl-p-Phenyl enediamine (1 - 5%) CAS#: - | 48 Hours | <i>Daphnia magna</i> | EC ₅₀ | 10.8 mg/L | Internal Data |

Algae

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|---------------|------------------|---------------|--|
| Disodium EDTA (1 - 5%) CAS#: 139-33-3 | 72 Hours | None reported | EC ₅₀ | 300 mg/L | ECHA |

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

No data available.

Bioaccumulation

MATERIAL DOES NOT BIOACCUMULATE

Mixture

No data available.

Partition coefficient

log K_{ow} ~ 0

Mobility

Soil Organic Carbon-Water Partition Coefficient

log K_{oc} ~ 0

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 11 / 14

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.

US EPA Waste Number Not applicable

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

Note: No special precautions necessary.

Additional information

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

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 12 / 14

| | |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product contains the following substances which are regulated 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 |
|---|-----------------------------|------------------------|---------------------------|----------------------------|
| Phosphoric acid, disodium salt 7558-79-4 | 5000 lb | - | - | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|--------------------------|----------------|--|
| Phosphoric acid, disodium salt 7558-79-4 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

IMERC: Not applicable

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

This product may contain substances regulated by state right-to-know regulations.

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Phosphoric acid, disodium salt 7558-79-4 | X | X | X |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA |
|--------------------------------|----------|---|
| Phosphoric acid, disodium salt | 180.0910 | 21 CFR 182.1778,21 CFR 182.6290,21 CFR 182.6778,21 CFR 182.8778 |
| Disodium EDTA | 180.0940 | - |

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

| | | | | |
|-------------|----------------------------------|-------------------------|-----------------------------|---|
| NFPA | Health hazards - 2 | Flammability - 0 | Instability - 0 | Physical and chemical properties - |
| HMIS | Health hazards - 2 - * | Flammability - 0 | Physical hazards - 0 | Personal protection - X - I |

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

| | |
|-------------|---|
| ACGIH | ACGIH (American Conference of Governmental Industrial Hygienists) |
| ATSDR | ATSDR (Agency for Toxic Substances and Disease Registry) |
| CCRIS | CCRIS (Chemical Carcinogenesis Research Information System) |
| CDC | CDC (Center for Disease Control) |
| CEPA | CEPA (Canadian Environmental Protection Agency) |
| CICAD | CICAD (Concise International Chemical Assessment Documents) |
| ECHA | ECHA (The European Chemicals Agency) |
| EEA | EEA (European Environment Agency) |
| EPA | EPA (Environmental Protection Agency) |
| ERMA | ERMA (New Zealand Environmental Risk Management Authority) |
| ECOSARS | Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™ |
| FDA | FDA (Food & Drug Administration) |
| GESTIS | GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance) |
| HSDB | HSDB (Hazardous Substances Data Bank) |
| INERIS | INERIS (The National Industrial Environment and Risks Institute) |
| IPCS INCHEM | IPCS INCHEM (International Programme on Chemical Safety) |
| IUCLID | IUCLID (The International Uniform Chemical Information Database) |
| NITE | Japan National Institute of Technology and Evaluation (NITE) |
| NIH | NIH (National Institutes of Health) |
| NIOSH | NIOSH (National Institute for Occupational Safety and Health) |
| LOLI | LOLI (List of Lists - An International Chemical Regulatory Database) |
| NDF | no data |
| NICNAS | Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) |
| NIOSH IDLH | Immediately Dangerous to Life or Health |
| OSHA | OSHA (Occupational Safety and Health Administration of the US Department of Labor) |
| PEEN | PEEN (Pan European Ecological Network) |
| RTECS | RTECS (Registry of Toxic Effects of Chemical Substances) |
| SIDS | SIDS (Screening Information Dataset) for High Volume Chemicals |
| SYKE | The Finnish Environment Institute (SYKE) |
| USDA | USDA (United States Department of Agriculture) |
| USDC | USDC (United States Department of Commerce) |
| WHO | WHO (World Health Organization) |

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. |

Product Code(s) 2105569
Issue Date 28-May-2021
Version 11.7

Product Name DPD Free Chlorine Reagent
Revision Date 26-Jan-2024
Page 14 / 14

| | | | |
|------|---------------------------|------|-----------------------|
| SKN* | Skin designation | SKN+ | Skin sensitization |
| RSP+ | Respiratory sensitization | ** | Hazard Designation |
| C | Carcinogen | R | Reproductive toxicant |
| M | mutagen | | |

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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