



Be Right™

# SAFETY DATA SHEET

Issue Date 25-Mar-2021

Revision Date 26-Jan-2024

Version 1.5

Page 1 / 15

## 1. IDENTIFICATION

### Product identifier

**Product Name** Diphenylcarbazone Reagent

### Other means of identification

**Product Code(s)** 96799

**Safety data sheet number** M00015

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

**Recommended Use** Laboratory reagent. Determination of chloride.

**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 (single exposure) | Category 3  |

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

Not applicable

### Label elements

#### **Signal word**

Warning



**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 2 / 15

#### Hazard statements

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

#### Precautionary statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical 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  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 - Use only outdoors or in a well-ventilated area  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P312 - Call a POISON CENTER or doctor if you feel unwell  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/ container to an approved waste disposal plant

#### Other Hazards Known

May be harmful if swallowed  
May be harmful in contact with skin  
May be harmful if inhaled

### 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 # |
|--|----------|---------------|---------|
| Phthalic acid                                      | 88-99-3  | 60 - 70%      | -       |
| Carbonic dihydrazide, 2,2-diphenyl-                | 140-22-7 | <1%           | -       |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide | 538-62-5 | <1%           | -       |

### 4. FIRST AID MEASURES

#### Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. If symptoms persist, call a physician.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 3 / 15

**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** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

**Symptoms** Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

**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.

**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** Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.

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

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

**Flammability class** Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

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

### Appropriate engineering controls

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

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

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

**Hand Protection** Impervious gloves. Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. 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.

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

**Skin and body protection** Long sleeved clothing. Wear suitable protective clothing. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse.

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

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

**Thermal hazards** None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                       |             |                       |                      |
|-----------------------|-------------|-----------------------|----------------------|
| <b>Physical state</b> | Solid       | <b>Color</b>          | Light pink to yellow |
| <b>Appearance</b>     | crystalline | <b>Odor threshold</b> | No data available    |
| <b>Odor</b>           | Odorless    |                       |                      |

| <u>Property</u>  | <u>Values</u>               | <u>Remarks • Method</u> |
|--|-----------------------------|-------------------------|
| <b>Molecular weight</b>                                | No data available           |                         |
| <b>pH</b>  | 3.1                         | @ 5 °C                  |
| <b>Melting point / freezing point</b>                  | 167 °C / 332.6 °F           |                         |
| <b>Initial boiling point and boiling range</b>         | No data available           |                         |
| <b>Evaporation rate</b>                                | Not applicable              |                         |
| <b>Vapor pressure</b>                                  | Not applicable              |                         |
| <b>Relative vapor density</b>                          | No data available           |                         |
| <b>Specific gravity - VALUE 1</b>                      | 1.40                        |                         |
| <b>Partition coefficient</b>                           | log K <sub>ow</sub> ~ -0.18 |                         |
| <b>Soil Organic Carbon-Water Partition Coefficient</b> | log K <sub>oc</sub> ~ 1.62  |                         |
| <b>Autoignition temperature</b>                        | No data available           |                         |
| <b>Decomposition temperature</b>                       | No data available           |                         |
| <b>Dynamic viscosity</b>                               | Not applicable              |                         |
| <b>Kinematic viscosity</b>                             | Not applicable              |                         |

### Solubility(ies)

#### **Water solubility**

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

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

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

### Other information

#### **Metal Corrosivity**

|                                |                   |
|--------------------------------|-------------------|
| <b>Steel Corrosion Rate</b>    | No data available |
| <b>Aluminum Corrosion Rate</b> | No data available |

#### **Volatile Organic Compounds (VOC) Content**

Not applicable

| Chemical name | CAS No | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|---------------|--------|--|---------------------|
|               |        |  |                     |

| Chemical name                                      | CAS No   | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|--|----------|--|---------------------|
| Phthalic acid                                      | 88-99-3  | No data available                        | -                   |
| Carbonic dihydrazide, 2,2-diphenyl-                | 140-22-7 | No data available                        | -                   |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide | 538-62-5 | 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

Excessive heat.

#### Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

#### Hazardous decomposition products

Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

#### Product Information

- Inhalation** May cause irritation of respiratory tract. May be harmful by inhalation.
- 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. Coughing and/ or wheezing.

**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 |
|--|----------------------|---------------|---------------|-----------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3                                  | Rat LD <sub>50</sub> | 1530 mg/kg    | None reported | None reported         | GESTIS   |
| Carbonic dihydrazide, 2,2-diphenyl- (<1%)<br>CAS#: 140-22-7                | Rat LD <sub>50</sub> | > 500 mg/kg   | None reported | None reported         | RTECS  |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide (<1%)<br>CAS#: 538-62-5 | Rat LD <sub>50</sub> | > 500 mg/kg   | None reported | None reported         | RTECS  |

**Dermal Exposure Route**

| Chemical name                             | Endpoint type           | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|-------------------------|---------------|---------------|-----------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | Rabbit LD <sub>50</sub> | 2740 mg/kg    | None reported | None reported         | GESTIS   |

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

| Chemical name                             | Endpoint type        | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|----------------------|---------------|---------------|-----------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | Rat LC <sub>50</sub> | > 5.1 mg/L    | 4 hours       | None reported         | GESTIS   |

**Inhalation (Vapor) 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)                 | 2,234.20 mg/kg           |
| ATEmix (dermal)               | 4,001.20 mg/kg           |
| ATEmix (inhalation-dust/mist) | 7.45 mg/l                |
| ATEmix (inhalation-vapor)     | 36.50 mg/l               |
| 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 |
|---|-------------|---------|---------------|---------------|-------------------------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | Patch test  | Rabbit  | 1000 mg       | None reported | 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 |
|---|-------------|---------|---------------|---------------|-------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | Rinse Test  | Rabbit  | 100 mg        | 1 hours       | Corrosive to eyes | ERMA   |

**Respiratory or skin sensitization**

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

**Mixture**

No data available.

**Ingredient Sensitization Data**

Test data reported below.

**Skin Sensitization Exposure Route**

| Chemical name                             | Test method   | Species    | Results                               | Key literature references and sources for data |
|---|---------------|------------|---------------------------------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | None reported | Guinea pig | Not confirmed to be a skin sensitizer | No information available                       |

**Respiratory Sensitization Exposure Route**

| Chemical name | Test method | Species | Results | Key literature references and |
|---------------|-------------|---------|---------|-------------------------------|
|---------------|-------------|---------|---------|-------------------------------|



**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 9 / 15

|  |               |            |                                       | <b>sources for data</b>  |
|--|---------------|------------|---------------------------------------|--------------------------|
| Phthalic acid<br>(60 - 70%)<br>CAS#: 88-99-3 | None reported | Guinea pig | Not confirmed to be a skin sensitizer | No information available |

**STOT - single exposure**

May cause respiratory irritation.

**Mixture**

No data available.

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

No data available.

**STOT - repeated exposure**

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

**Mixture**

No data available.

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

Test data reported below.

**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> |
|--|-------------------------|----------------------|----------------------|---|---|
| Phthalic acid<br>(60 - 70%)<br>CAS#: 88-99-3 | Rat<br>TD <sub>Lo</sub> | 102 mg/kg            | 182 days             | <b>Blood</b><br>Changes in serum composition<br>(e.g. TP, bilirubin, cholesterol) | RTECS   |

**Carcinogenicity**

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

**Mixture**

No data available.

**Ingredient Carcinogenicity Data**

No data available.

| <b>Chemical name</b>                                  | <b>CAS No</b> | <b>ACGIH</b> | <b>IARC</b> | <b>NTP</b> | <b>OSHA</b> |
|---|---------------|--------------|-------------|------------|-------------|
| Phthalic acid   | 88-99-3       | -            | -           | -          | -           |
| Carbonic dihydrazide,<br>2,2-diphenyl-                | 140-22-7      | -            | -           | -          | -           |
| Diazenecarboxylic acid,<br>phenyl-, 2-phenylhydrazide | 538-62-5      | -            | -           | -          | -           |

**Legend**

|  |                |
|--|----------------|
| <b>ACGIH (American Conference of Governmental Industrial Hygienists)</b> | Does not apply |
| <b>IARC (International Agency for Research on Cancer)</b>                | Does not apply |
| <b>NTP (National Toxicology Program)</b>                                 | Does not apply |
| <b>OSHA</b>  | 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 |
|---|------------|------------------|---------------|---------------|---------------------------------------|--|
| Carbonic dihydrazide, 2,2-diphenyl- (<1%)<br>CAS#: 140-22-7 | DNA repair | Escherichia coli | 0.2 mg/well   | None reported | Positive test result for mutagenicity | RTECS  |

**Mixture in vivo Data**

No data available.

**Substance in vivo Data**

No data available.

**Reproductive toxicity**

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

**Mixture**

No data available.

**Ingredient Reproductive 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 |
|---|-------------------------|---------------|---------------|---|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | Rat<br>TD <sub>Lo</sub> | 29810 mg/kg   | 9 days        | <b>Effects on Embryo or Fetus</b><br>Fetotoxicity (except death e.g. stunted fetus)<br>Maternal Effects<br>Other effects<br><b>Specific Developmental Abnormalities</b><br>Musculoskeletal system | RTECS  |

**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 |
|--|---------------|---------------|------------------|---------------|--|
| Carbonic dihydrazide, 2,2-diphenyl- (<1%)<br>CAS#: 140-22-7                | 96 hours      | None reported | LC <sub>50</sub> | 6.305 mg/L    | ECOSARS  |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide (<1%)<br>CAS#: 538-62-5 | 96 hours      | None reported | LC <sub>50</sub> | 5.345 mg/L    | ECOSARS  |

**Crustacea**

| Chemical name  | Exposure time | Species              | Endpoint type    | Reported dose | Key literature references and sources for data |
|--|---------------|----------------------|------------------|---------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3                                  | 48 Hours      | <i>Daphnia magna</i> | EC <sub>50</sub> | > 640 mg/L    | Vendor SDS                                     |
| Carbonic dihydrazide, 2,2-diphenyl- (<1%)<br>CAS#: 140-22-7                | 48 Hours      | None reported        | LC <sub>50</sub> | 38.214 mg/L   | ECOSARS  |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide (<1%)<br>CAS#: 538-62-5 | 48 Hours      | <i>Daphnia sp.</i>   | LC <sub>50</sub> | 30.93 mg/L    | ECOSARS  |

**Algae**

| Chemical name  | Exposure time | Species       | Endpoint type    | Reported dose | Key literature references and sources for data |
|--|---------------|---------------|------------------|---------------|--|
| Carbonic dihydrazide, 2,2-diphenyl- (<1%)<br>CAS#: 140-22-7                | 96 hours      | None reported | EC <sub>50</sub> | 1.497 mg/L    | ECOSARS  |
| Diazenecarboxylic acid, phenyl-, 2-phenylhydrazide (<1%)<br>CAS#: 538-62-5 | 96 hours      | None reported | EC <sub>50</sub> | 1.293 mg/L    | ECOSARS  |

**Aquatic Chronic Toxicity**

Test data reported below.

**Fish**

| Chemical name                             | Exposure time | Species                    | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|----------------------------|---------------|---------------|--|
| Phthalic acid (60 - 70%)<br>CAS#: 88-99-3 | 60 days       | <i>Oncorhynchus mykiss</i> | NOEC          | 10 mg/L       | Vendor SDS                                     |

**Crustacea**

| Chemical name | Exposure time | Species              | Endpoint type | Reported dose | Key literature references and sources for data |
|---------------|---------------|----------------------|---------------|---------------|--|
| Phthalic acid | 21 days       | <i>Daphnia magna</i> | NOEC          | 16 mg/L       | Vendor SDS                                     |

|                             |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|
| (60 - 70%)<br>CAS#: 88-99-3 |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|

#### Algae

| Chemical name                                | Exposure time | Species                        | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|--------------------------------|---------------|---------------|--|
| Phthalic acid<br>(60 - 70%)<br>CAS#: 88-99-3 | 72 hours      | <i>Desmodismus subspicatus</i> | NOEC          | > 100 mg/L    | Vendor SDS                                     |

#### Persistence and degradability

##### Mixture

No data available.

##### Bioaccumulation

MATERIAL DOES NOT BIOACCUMULATE

##### Mixture

No data available.

##### Partition coefficient

log  $K_{ow}$  ~ -0.18

##### Mobility

##### Soil Organic Carbon-Water Partition Coefficient

log  $K_{oc}$  ~ 1.62

##### Other adverse effects

No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

##### Contaminated packaging

Do not reuse empty containers.

##### US EPA Waste Number

No data available

##### Special instructions for disposal

If permitted by regulation. Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Dispose of material in an E.P.A. approved hazardous waste facility.

### 14. TRANSPORT INFORMATION

##### DOT

Not regulated

##### TDG

Not regulated

##### IATA

Not regulated

##### IMDG

Not regulated

**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 13 / 15

#### **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**

|                 |          |
|-----------------|----------|
| <b>TSCA</b>     | Complies |
| <b>DSL/NDSL</b> | Complies |

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

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

### **International Inventories**

|                      |          |
|----------------------|----------|
| <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 |

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

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

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**TCSI** - Taiwan Chemical Substances Inventory

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

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

#### **CWA (Clean Water Act)**

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

#### **CERCLA**

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

### **US State Regulations**

#### **California Proposition 65**

**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 14 / 15

This product does not contain any Proposition 65 chemicals

**IMERC:** Not applicable

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

This product does not contain any substances regulated by state right-to-know regulations.

### U.S. EPA Label Information

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

### Special Comments

None

### Additional information

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

Not applicable

#### **NFPA and HMIS Classifications**

|             |                           |                         |                             |   |
|-------------|---------------------------|-------------------------|-----------------------------|---|
| <b>NFPA</b> | <b>Health hazards</b> - 2 | <b>Flammability</b> - 0 | <b>Instability</b> - 0      | <b>Physical and chemical properties</b> - |
| <b>HMIS</b> | <b>Health hazards</b> - 2 | <b>Flammability</b> - 0 | <b>Physical hazards</b> - 0 | <b>Personal protection</b> -<br>X<br>- 1  |

### 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's 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)  |

**Product Code(s)** 96799  
**Issue Date** 25-Mar-2021  
**Version** 1.5

**Product Name** Diphenylcarbazone Reagent  
**Revision Date** 26-Jan-2024  
**Page** 15 / 15

USDC  
WHO

USDC (United States Department of Commerce)  
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. |
| SKN* | Skin designation                | SKN+    | Skin sensitization  |
| RSP+ | Respiratory sensitization       | **      | Hazard Designation  |
| C    | Carcinogen                      | R       | Reproductive toxicant   |
| M    | mutagen                         |         |   |

**Prepared By** Hach Product Compliance Department

**Issue Date** 25-Mar-2021

**Revision Date** 26-Jan-2024

**Revision Note** None

**Disclaimer**

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

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

HACH COMPANY©2023

**End of Safety Data Sheet**