

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

Product name: BDN  
 Product Number: 20160  
 Product use: For laboratory research purposes  
 Restrictions on use: Not for drug or household use  
 Safety Sheet Supplier: Oakley, Inc.  
 4000 Luxottica Place  
 Mason, OH 45040  
 USA  
 Telephone: (614) 492-5610  
 Emergency Phone: (614) 674-4846  
 E-mail address: info.exciton@luxotticaretail.com

**2. HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

H302 Acute toxicity, Oral (Category 4),  
 H332 Acute toxicity, Inhalation (Category 4),  
 H312 Acute toxicity, Dermal (Category 4),

**Label elements**

Pictogram



Signal word Warning

Hazard statement(s)

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

Precautionary statement(s)

P261 Avoid breathing dust  
 P264 Wash skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area  
 P280 Wear protective gloves/ protective clothing.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P322 Specific measures (see supplemental first aid instructions on this label).  
 P330 Rinse mouth  
 P363 Wash contaminated clothing before reuse  
 P501 Dispose of contents/ container to an approved waste disposal plant

**Hazards not otherwise classified or not covered by GHS**

None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Bis(4-dimethylaminodithiobenzil) nickel  
Formula: C32 H30 N2 S4 Ni  
Molecular Weight: 629.55  
CAS-No.: T38465-55-3  
EC-No.: 253-958-9

No ingredients are hazardous according to OSHA criteria.  
No components need to be disclosed according to the applicable regulations.

### 4. FIRST AID MEASURES

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water for 15 minutes as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

No further relevant information available

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>), sulfur oxides

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Wear personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Hygiene measures and engineering controls**

Adequate ventilation and/or containment in accordance with good laboratory practices.

**Personal protective equipment****Respiratory protection**

Where protection from nuisance levels of dusts are desired, use type P95 (US) or type P1 (EU EN 143) dust masks. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with impermeable gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye / face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                                |
|---|--------------------------------|
| a) Appearance                                   | Form: powder<br>Color: black   |
| b) Odor   | No data available              |
| c) Odor Threshold                               | No data available              |
| d) pH   | No data available              |
| e) Melting point                                | No data available              |
| f) Initial boiling point and boiling range      | No data available              |
| g) Flash point                                  | No data available              |
| h) Evaporation rate                             | No data available              |
| i) Flammability                                 | No data available              |
| j) Upper/lower flammability or explosive limits | No data available              |
| k) Vapor pressure                               | No data available              |
| l) Vapor density                                | No data available              |
| m) Relative density                             | No data available              |
| n) Solubility                                   | Negligible solubility in water |
| o) Partition coefficient: n-octanol/water       | No data available              |
| p) Auto-ignition temperature                    | No data available              |
| q) Decomposition temperature                    | No data available              |
| r)  |                                |
| s)  |                                |
| t) Viscosity                                    | No data available              |

**10. STABILITY AND REACTIVITY**

- |  |   |
|--|---|
| a) Reactivity                                  | No data available                           |
| b) Chemical stability                          | Stable under recommended storage conditions |
| c) Possibility of hazardous reactions          | No data available                           |
| d) Conditions to avoid (e.g. static discharge) | No data available                           |
| e) Incompatible materials                      | Strong oxidizing agents                     |
| f) Hazardous decomposition products            | See Section 5.                              |

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Routes of Exposure:**

Inhalation, Eye contact, Ingestion, Skin contact.

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: Not available

**12. ECOLOGICAL INFORMATION****Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

No data available

**13. DISPOSAL CONSIDERATIONS****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION****SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (de Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Nickel compounds

**New Jersey Right To Know Components**

Nickel compounds

**California Prop. 65 Components**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**16. OTHER INFORMATION**

|      |                              |
|------|------------------------------|
| H302 | Harmful if swallowed         |
| H312 | Harmful in contact with skin |
| H332 | Harmful if inhaled           |

**HMIS Rating**

|                        |   |
|------------------------|---|
| Health hazard:         | 2 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard:       | 0 |

**NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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**Revised Date: March 6, 2017**