

**NIPPON VALQUA INDUSTRIES, LTD.****Safety Data Sheet**

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**1. Identification of the Product and of the Company**

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|----------------------|---|
| Product Name         | BLACKTIGHT®   |
| Product Code         | Valqua No. 6590, 6591, 6592, 6596                       |
| Company              | NIPPON VALQUA INDUSTRIES, LTD.                          |
| Address              | 1-1, Osaki 2-chome, Shinagawa-ku, 141-6024 Tokyo, Japan |
| Department in Charge | TECHNICAL SOLUTION DIVISION, SALES GROUP                |
| Phone                | +81-3-5434-7379   |
| Fax                  | +81-3-5436-0571   |
| Created              | May 15, 1998  |
| Revised              | August 23, 2016   |

The product is a spiral-wound gasket made with VALQUAFOIL® filler. Product variants are available with metal inner and outer rings and branches so that they fit the intended target flange.

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**2. Hazards Identification**

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The products take the form of a solid during normal handling and are not subject to GHS classification as they do not exist in powder form. However, they are subject to management as described below due to the possibility that the VALQUAFOIL® filler may scatter under certain circumstances, for example when a gasket that has adhered to a flange is removed after an extended period of use.

**GHS Classification**

|                               |   |
|-------------------------------|---|
| Physical and Chemical Hazards | Not applicable (classification not possible, not applicable for classification, not classified) |
| Health Hazards                | Not applicable (classification not possible, not applicable for classification, not classified) |
| Environmental Hazards         | Not applicable (classification not possible, not applicable for classification, not classified) |

**GHS Label Elements**

|                    |  |
|--------------------|--|
| Pictograms/Symbols | No pictograms corresponding to GHS standards   |
| Signal Words       | No signal words corresponding to GHS standards   |
| Hazard Statements  | No hazard statements corresponding to GHS standards  |
| Other Hazards      | <ul style="list-style-type: none"><li>• Inhalation of large quantities of dust over an extended period of time may affect the respiratory organs.</li><li>• Wash hands thoroughly after handling.</li><li>• Dispose of contents and container in accordance with applicable international, national, prefectural, or local (city, town, or village) regulations.</li></ul> |

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**3. Composition/Information on Ingredients**

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|---------------------------|--|
| Single Product or Mixture | Mixture (composite composition)  |
| Ingredients               | Hoops, inner rings, and outer rings: Typically fabricated from a metal such as carbon steel (CS) or stainless steel.<br>VALQUAFOIL® filler: Black lead |

## Ingredients of VALQUAFOIL® Filler

| Ingredient          | CAS Number | PRTR           | Official Gazette<br>Reference Number | Concentration<br>(wt %) |
|---------------------|------------|----------------|--------------------------------------|-------------------------|
| Black lead          | 7782-42-5  | Not applicable | —                                    | 90                      |
| Phosphorus compound | —          | Not applicable |                                      | 10                      |

## 4. First-Aid Measures

|              |  |
|--------------|--|
| If Inhaled   | <ul style="list-style-type: none"> <li>In the event of inhalation of dust from the product, move immediately to a location with fresh air.</li> <li>Seek medical attention in the event of respiratory abnormality.</li> </ul> |
| If On Skin   | <ul style="list-style-type: none"> <li>Rinse the affected area immediately with soap and running water.</li> </ul>   |
| If In Eyes   | <ul style="list-style-type: none"> <li>Do not rub the eyes. Rinse immediately with plenty of water.</li> <li>Seek ophthalmologist's attention in the event of foreign-body sensation or pain.</li> </ul>                       |
| If Swallowed | <ul style="list-style-type: none"> <li>Induce vomiting and immediately rinse the mouth thoroughly with water.</li> <li>Seek medical attention in the event of any other unusual condition.</li> </ul>                          |

## 5. Fire-Fighting Measures

|                                 |  |
|---------------------------------|--|
| Extinguishing Media             | Standard extinguishing agent such as water, carbon dioxide gas, or powder                          |
| Special Firefighting Procedures | Standard firefighting procedures   |
| Protection of Firefighters      | During firefighting work, use a suitable respirator and protective clothing depending on the fire. |

## 6. Accidental Release Measures

Although no special measure is required for solid materials, collect cutting powder carefully into an empty container, for example, using a vacuum, but not a broom, to reduce its scatter to a minimum.

## 7. Handling and Storage

|  |  |
|--|--|
| Handling                                   |  |
| Technical Measures                         | Wear protective gear and take the equipment-related steps described in "8. Exposure Controls/Personal Protection."   |
| Local Exhaust/<br>General Ventilation      | Ventilate the local area where the product is being handled or the entire facility as described in "8. Exposure Controls/Personal Protection."   |
| Precautions for Safe<br>Handling           | <ul style="list-style-type: none"> <li>Do not inhale or ingest the product.</li> <li>Wash hands thoroughly after handling the product.</li> </ul>  |
| Storage                                    |  |
| Technical Measures                         | No special technical measures are needed.  |
| Incompatibilities                          | See "10. Stability and Reactivity."  |
| Conditions for Safe<br>Storage             | <ul style="list-style-type: none"> <li>Do not bend or twist the product, or submit it to compressive or tensile forces perpendicular to its face.</li> <li>Keep the product indoors, at normal temperature and in ambient atmosphere. Store it avoiding moisture and damage.</li> <li>Do not use fire.</li> <li>Avoid coexistence or contact with strong oxidant.</li> </ul> |
| Safe Materials for<br>Containers/Packaging | It is recommended to store the product in its original container and packaging.  |

## 8. Exposure Controls/Personal Protection

## Control Limits/Exposure Limits:

The following table lists control limits and exposure limits for each ingredient:

| Ingredients | Control Limits | Exposure Limits   |   |
|-------------|----------------|---|---|
|             |                | Japan Society for Occupational Health   | ACGIH   |
| Black lead  | No data        | Class 1 dust<br>Respirable dust: 0.5 mg/m <sup>3</sup><br>Total dust: 2 mg/m <sup>3</sup> | TWA 2 mg/m <sup>3</sup> respirable fraction<br>all forms except graphite fibers |

|                                  |   |
|----------------------------------|---|
| Appropriate Engineering Controls | Install a local exhaust system.                   |
| Protective Gear                  |   |
| Respiratory Protection           | Wear dust mask.                                   |
| Eye Protection                   | Wear dust-proof glasses.                          |
| Skin and Body Protection         | Wear gloves and long-sleeved work clothes.        |
| Hygiene Measures                 | Wash hands thoroughly after handling the product. |

## 9. Physical and Chemical Properties

|            |  |
|------------|--|
| Appearance | Product variants have inner and outer metal rings and metal branches so that they fit the intended target flange. The part of VALQUAFOIL® filler is black solid. |
|------------|--|

## Physical and Chemical Properties of VALQUAFOIL® filler

|                |   |
|----------------|---|
| Odor           | None.   |
| Melting Point  | Not at normal pressure  |
| Boiling Point  | Not at normal pressure  |
| Vapor Pressure | Negligible at room temperature  |
| Solubility     | Black lead: Insoluble in water and organic solvent<br>Phosphoric acid: Readily soluble in water and alcohol |
| Flash Point    | None  |
| Ignition Point | None  |
| Conductivity   | Conducting  |

## 10. Stability and Reactivity

|                                    |  |
|------------------------------------|--|
| Oxidation Nature                   | None (room temperature)                                      |
| Stability                          | Stable under normal handling condition at normal temperature |
| Possibility of Hazardous Reactions | No hazardous reactions under normal condition                |
| Conditions to Avoid                | Prevent dust generation and diffusion                        |
| Incompatible Materials             | None   |
| Hazardous Decomposition Products   | None   |

## 11. Toxicological Information

Information on VALQUAFOIL® filler

|                           |         |
|---------------------------|---------|
| Acute Toxicity            | No data |
| Skin Corrosion/Irritation | No data |
| Serious Eye Damage/       | No data |

## Eye Irritation

Respiratory Sensitization No data

Skin Sensitization No data

Germ Cell Mutagenicity No data

Carcinogenicity No data

Reproductive Toxicity No data

STOT/Systemic Toxicity – No data

Single Exposure

STOT/Systemic Toxicity – No data

Repeated Exposure

Aspiration Hazard No data

## 12. Ecological Information

Ecotoxicity Phosphorus compounds: Soluble in water, producing phosphate ions  
 Fish toxicity: Lm 96 = 1,000~100 (mass ppm)  
 Causes eutrophication if discharged into waters because of contained phosphorus

Persistence and No data

Degradability

Bioaccumulative Potential No data

Mobility in Soil No data

## 13. Disposal Considerations

Disposal of Waste Residues Comply with all applicable regulations and local standards when disposing of the product. Contract disposal to an industrial waste treatment company that has been authorized by the governor of the prefecture in question or other governmental authority, or, if applicable, to a local, government-run organization that performs such treatment and disposal. If outsourcing disposal of waste, ensure that the contractor has been provided with adequate information concerning the dangers and hazards posed by the product.

Contaminated Containers and Packaging Contract disposal to a specialized waste treatment company that has been authorized by the governor of the prefecture in question.

## 14. Transport Information

International Regulations Not applicable

Japanese Regulations No laws or regulations apply to transport of the product.

Specific Safety Measures Transport of the product is not subject to any special precautions. However, avoid exposing the product to water or handling it roughly so as not to damage its packaging or otherwise compromise its quality.

## 15. Regulatory Information

PRTR Law, Japan Not applicable

Poisonous and Deleterious Not applicable

Substances Control Act,  
Japan

Industrial Safety and Health Act, Japan Does not qualify as a substance requiring labeling (under the provisions of Article 57-1 of the Act).

Does not qualify as a notifiable substance (under the provisions of Article 57-2 Item 1 of the Act).

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**16. Other Information**

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None

This safety data sheet has been compiled based on the latest information and data available at the present time. It may be revised as new knowledge comes to light. The precautionary information provided in this safety data sheet applies to normal handling of the product described. Special handling or use of the product should be accompanied by safety measures that are appropriate given the application and method of use. Although the company has exercised all necessary caution in compiling the information provided by this safety data sheet, it makes no guarantee as to the accuracy of the sheet's contents.