

## Material Safety Data Sheet

Date: January 18, 2011

Revision Date:

### 1. Product and company identification

**Product name:** BARRIERTA IEL/V  
**Company:** NOK KLÜBER CO.,LTD  
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**Telephone:** +81-293-42-5365  
**Fax:** +81-293-43-3817  
**Recommended use:** Lubricating grease

### 2. Hazardous identification

#### GHS classification:

|                              |   |   |
|------------------------------|---|---|
| <b>Physical Hazards</b>      | Flammable Solids  | Not classified  |
| <b>Health Hazards</b>        | Acute Toxicity (oral)<br>Acute Toxicity (dermal)<br>Acute Toxicity (inhalation)<br>Skin Corrosion / Irritation<br>Serious Eye Damage / Eye Irritation<br>Respiratory or Skin Sensitization<br>Germ Cell Mutagenicity<br>Carcinogenicity<br>Reproductive Toxicity<br>Specific Target Organ Toxicity - Single Exposure<br>Specific Target Organ Toxicity - Repeated Exposure<br>Aspiration Hazard | Not classified<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible<br>Classification not possible |
| <b>Environmental Hazards</b> | Hazardous to Aquatic Environment - Acute Toxicity<br>Hazardous to Aquatic Environment - Chronic Toxicity  | Classification not possible<br>Classification not possible  |

#### GHS Label Elements:

< Symbol > No symbol  
< Signal word > No signal word  
< Hazard statement > No hazard statement

#### < Precautionary statement >

**Prevention** Not applicable

**Response** Not applicable

**Storage** Not applicable

**Disposal** Not applicable

**Other information:** >280°C traces of fluorinated products

Some materials (e.g. titanium, aluminum or alloys of these materials) may cause lower decomposition temperatures.

Prolonged skin contact may cause skin irritation and/or dermatitis.

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### 3. Composition/information on ingredients

**Chemical names and synonyms:** Fluorinated lubricating grease

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| CAS No.       | Components              | Value |
|---------------|-------------------------|-------|
| Trade secrets | Perfluoropolyether      | -     |
| 9002-84-0     | Polytetrafluoroethylene | -     |
| Trade secrets | Additives               | -     |

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**Hazardous ingredients:** Void

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### 4. First aid measures

#### **After inhalation**

Remove victim to fresh air. If symptoms persist, call a physician.

#### **After contact with skin**

Wash off with mild cleaners and plenty of water. If symptoms persist, call a physician.

#### **After contact with eyes**

Rinse with plenty of water. If symptoms persist, call a physician.

#### **After ingestion**

If large amounts are swallowed, do not induce vomiting. Obtain medical attention.

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### 5. Fire-fighting measures

#### **Suitable extinguishing media**

The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Special hazards**

In case of fire the following can be released: traces of fluorinated products

#### **Special protective equipment for firefighters**

Standard procedure for chemical fires.

#### **Additional information**

Water mist may be used to cool closed containers.

In the event of the fire and/or explosion do not breathe fumes.

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## **6. Accidental release measures**

### **Personal precautions**

Not required

### **Environmental precautions**

Do not flush into surface water or sanitary sewer system.

### **Methods for cleaning up/taking up**

Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations.

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## **7. Handling and storage**

### **Handling**

#### **Advice on safe handling**

No special handling advice required.

#### **Advice on protection against fire and explosion**

No special precautions required.

### **Storage**

#### **Requirements on storage conditions**

Store at room temperature in the original container.

#### **Incompatible materials**

Do not store together with food.

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## **8. Exposure controls/personal protection**

### **Additional advice on system design**

not applicable

### **Ingredients and specific control parameters**

None

### **Personal protective equipment**

#### **Respiratory protection**

No special protective equipment required.

#### **Hand protection**

Wear chemical-resistant gloves.

### Eye protection

Wear safety glasses. Do not wear contact lenses when working with chemicals.

### Body protection

Wear clean, body-covering clothing to minimize dermal exposure.

### General protection and hygiene measures

Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream. Keep away from tobacco products.

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## 9. Physical and chemical properties

|   |               |                          |
|---|---------------|--------------------------|
| Form:                                       | paste         |                          |
| Color:                                      | white         |                          |
| Odor:                                       | none          |                          |
| Density:                                    | approx. 1.95  | g/cm <sup>3</sup> , 20°C |
| pH:   | not available |                          |
| Change in condition:                        | not available |                          |
| Boiling point:                              | not available |                          |
| Flash point:                                | none          | °C                       |
| Ignition temperature:                       | not available | °C                       |
| Lower explosion limit:                      | not available |                          |
| Upper explosion limit:                      | not available |                          |
| Vapor pressure:                             | not available |                          |
| Vapor density:                              | not available |                          |
| Water solubility:                           | insoluble     |                          |
| Partition coefficient<br>(n-octanol/water): | not available |                          |
| Decomposition temperature:                  | not available |                          |

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## 10. Stability and reactivity

### Stability

Stable

**Conditions to avoid**

None

**Materials to avoid**

Strong bases, alkali metals, alkaline earth metals, Lewis acids

**Hazardous decomposition products**

>280°C traces of fluorinated products

**Additional information**

None

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**11. Toxicological information**

The toxicological data has been taken from products of similar composition.

**Acute toxicity:** No information

**Skin Corrosion / Irritation:** Prolonged skin contact may cause skin irritation and/or dermatitis.

**Eye Damage / Irritation:** No information

**Sensitization:** No information

**Germ Cell Mutagenicity:** No information

**Carcinogenicity:** No information

**Reproductive Toxicity:** No information

**Specific Target Organ Toxicity:**

**Single Exposure** No information

**Repeated Exposure** No information

**Aspiration Hazard:** No information

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**12. Ecological information**

**Information on elimination (persistence and degradability)**

Product is insoluble in water. May be separated out mechanically in purification plants.

**Behavior in environmental compartments**

Ecological injuries are not known or expected under normal use.

**Ecotoxic effects**

Aquatic toxicity is unlikely due to low solubility.

#### **Additional information**

Should not be released into the environment.

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### **13. Disposal considerations**

This product can be incinerated when in compliance with local, state and federal regulations.

This product contains halogen.

Offer rinsed packaging material to local recycling facilities.

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### **14. Transport information**

**UN class :** not applicable

**UN No.:** not applicable

#### **Advice on transportation**

Not classified as dangerous in the meaning of transport regulations.

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### **15. Regulatory information**

Please refer to the law and local regulations, etc. in each country.

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### **16. Other information**

No information

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The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid if the material is used in combination with any other materials or if it is processed, unless specified in the text.

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