

#### **MATERIAL SAFETY DATA SHEET**

Material Safety Data Sheet according to 91/155/EEC, the standards and regulatory requirements of United States. Date of issue: 01/09/2005

#### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Product Name: VITON® compound VK801

MSDS N°: V0008

Chemical Name: Fluorinated Elastomer

Company:

ERIKS by Toermalijnstraat 5

1812 RL Alkmaar

Postbus 280, 1800 BK Alkmaar

Tel. +31 72 / 514 15 14 Fax +31 72 / 515 56 45

info@eriks.nl www.eriks.nl

www.eriks.nl www.oil-seals.info



#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Chemical Nature (preparation)**

#### **Description:**

Vinylidene fluoride-hexafluoropropene polymer (CAS number: 9011-17-0) Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund amendments and Reauthorization Act of 1986 and 40 CFR part 372.

#### 3. HAZARDS IDENTIFICATION

#### **Potential Health Effects**

Skin contact with material may cause skin with discomfort or rash. Significant skin permeation and systemic toxicity after contact appears unlikely. There are no reports of human sensitization.

Inhalation of fumes from burning polymer may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath. Higher exposures to fumes from burning material may cause pulmonary edema (body fluid in lungs) with cough, wheezing, abnormal lung sounds possibly progressing to severe shortness of breath and blush discoloration of the skin. Symptom may be delayed. Prompt medical attention is required.

Smokers should avoid contamination of tobacco products with polymer and should wash their hands before smoking.

#### **Carcinogenicity Information**

None of the components present in this material at concentrations equal to or greater than 0,1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.



FRI

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.



#### **MATERIAL SAFETY DATA SHEET**

#### 4. FIRST AID MEASURES

#### Inhalation

If exposed to fumes from overheating or combustion, move to fresh air; Consult a physician if symptoms persist.

#### **Skin Contact**

Wash with soap and water.

#### **Eye Contact**

Flush eyes with plenty of water. Consult a physician if symptoms persist.

#### Ingestion

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

#### 5. FIRE FIGHTING MEASURES

#### Flammable properties

Flash point: > 204°C / 399°F Method: Open cup

#### Fire and Explosion hazards

Hazardous gasses/vapors produced in fire are hydrogen fluoride (HF), carbonyl fluoride, carbon monoxide, low molecular weight fluorocarbons.

#### **Extinguishing Media**

Water, Foam, Dry Chemical, CO<sub>2</sub>

#### **Fire Fighting Instructions**

Wear self-contained breathing apparatus. Wear full protective equipment.

Does not burn without an external flame. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear Neoprene gloves when handling refuse from a fire.

### 6. ACCIDENTAL RELEASE MEASURES

#### Safeguards (Personnel)

Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

#### Spill Clean up

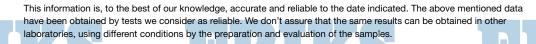
Sweep up to avoid slipping hazard.

ERIKS

FRI







# **ERIKS**

#### **MATERIAL SAFETY DATA SHEET**

#### 7. HANDLING AND STORAGE

#### Handling

Protect against fire.

#### **Storage**

Store in cool and dry place.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Engineering Controls**

#### Ventilation:

Vapors and fumes liberated from compounds during hot cured processing should be exhausted from work areas to maintain hydrogen fluoride concentration below the PEL.

### Personal Protective Equipment Respirators:

when temperature exceeds 200°C and ventilation is inadequate to maintain concentration below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection.



#### **Protective Clothing:**

If there is potential contact with hot/molten material, wear heat resistant clothing and footwear. Do not touch decomposed parts even when cool. Neoprene gloves recommended.



#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Physical Data:**

Melting Point: NA
% Volatiles: NA
Solubility in Water: insoluble
Odor: None

Color: Black Appearance: Solid Specific Gravity: 1.85



ERIKS

ERIKS

ERI

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.

01.06.2007

# ERIKS

#### **MATERIAL SAFETY DATA SHEET**

#### 10. STABILITY AND REACTIVITY

#### **Chemical Stability**

Stable at normal temperature and storage condition.

#### Conditions to avoid

Temperaturs above 200°C

#### Incompaibility with other materials

Incompatibility with finely divided metals such as aluminium.

Compounding with metal powers presents an explosion hazard.

#### **Decomposition**

Hazardous decomposition products: Hydrogen fluoride (HF) and perfluorolefins.

If the finish part is used or tested at temperature above 316°C, the surface of the parts may contain HF or HF condensate, which may cause severe burns, sometimes with symptoms delayed for several hours. Wear Neoprene or PVC (if temperature is blow melting point of PVC) gloves when handling parts or equipment after exposure to such high temperatures. if condensate is expected, wash equipment and parts well with limewater (calcium hydroxide solution). Discard gloves after handling degrated these parts.



#### 11. ECOLOGICAL INFORMATION

#### **Ecotoxicological information**

Aquatic toxicity: No information is available.

Toxicity is expected to be low based on insolubility in water.



#### 12. DISPOSAL CONSIDERATIONS

#### Waste disposal

Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. The high fuel value of this product makes option 2 very desirable for material that cannot be recycled, but incinerator must be cabaple of scrubbing out acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provicial, and local regulations.



ERIKS

ERIKS

ERI

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.



#### **MATERIAL SAFETY DATA SHEET**

#### 13. TRANSPORTATION INFORMATION

#### **Shipping information**

DOT

Proper shipping name: not regulated Hazard class: not regulated

#### 14. REGULATORY INFORMATION

#### **U.S. Federal Regulations**

TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.

State Regulations (U.S.): No substances on the state hazardous substances list are used in this compound.

#### 15. OTHER INFORMATION

#### **Additional Information**

Medical use: Do not use in medical applications involving permanent implantation in human body.

### Important Note:

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. This information is obtained from various sources including the manufacturer and other third party sources. The safety data sheet only describes the products in aspect to their safety requirements.



ERIKS

FRIKS

ERIKS

ERIKS

ERI

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.

01.06.2007

# **ERIKS**

**MATERIAL SAFETY DATA SHEET** 

FOR MORE INFORMATION:

#### THE NETHERLANDS

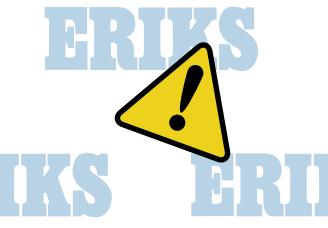
ERIKS by

Toermalijnstraat 5 1812 RL Alkmaar

Postbus 280, 1800 BK Alkmaar

Tel. +31 72 / 514 15 14 Fax +31 72 / 515 56 45

info@eriks.nl www.eriks.nl



#### BELGIUM

ERIKS nv

Boombekelaan 3 B-2660 Hoboken

Tel. +32 3 / 829 26 11

Fax +32 3 / 828 39 59

info@eriks.be www.eriks.be ERIKS

FRIKS

#### FRANCE

ERIKS sarl

52, avenue des Frères-Lumière BP 151

F-78196 Trappes cedex

Tel. +33 1 / 34 82 10 00

Fax +33 1 / 34 82 10 32 sce.clientele@eriks.fr

ERIKS

ERI

#### GERMANY

**ERIKS Gruppe Deutschland** 

Brönninghauser Str. 38 33729 Bielefeld

Tel. +49 521/9399-0

Fax +49 521/9399-49

www.eriks.de

ERIKS

BRIKS

For more technical compound info, consult: www.O-ring.info

For more technical compound into, const

ERIKS

HRI

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.

01.06.2007