

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : ZPE450-K21 hebro®dielektric 2

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-  
stance/Mixture : Dielectric

#### 1.3 Details of the supplier of the safety data sheet

Company : hebro chemie GmbH  
Rostocker Str. 40  
41199 Mönchengladbach

Contact person : Wolfgang Schaffers  
Telephone : +49 (0) 2166 6009-0  
Telefax : +49 (0) 2166 6009-99

Contact person product safety : Abteilung Produktsicherheit  
E-mail address : info-produktsicherheit@gmx.de

#### 1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:  
+49 (0) 361 730 730

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters airways.

##### Classification (67/548/EEC, 1999/45/EC)

Harmful R65: Harmful: may cause lung damage if swallowed.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie  
GmbH



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: H304

May be fatal if swallowed and enters air-ways.

Precautionary statements

: **Response:**  
P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting.

P331

**Storage:**

P405

Store locked up.

**Disposal:**

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

- 8042-47-5 White mineral oil

### Labelling according to EC Directives (1999/45/EC)

Hazard pictograms

:



Harmful

R-phrase(s)

: R65

Harmful: may cause lung damage if swallowed.

S-phrase(s)

: S62

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### 2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

not applicable

### 3.2 Mixtures

Chemical nature : Isoparaffins

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
White mineral oil	8042-47-5 232-455-8 01-2119487078-27		Asp. Tox. 1; H304	<= 100

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

For the full text of the Notas mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : Provide fresh air.  
Keep patient warm and at rest.  
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.  
After contact with skin, wash immediately with plenty of soap and water.
- In case of eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.  
Seek medical advice.
- If swallowed : Call a physician immediately.  
Keep at rest.  
Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Erythema

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.  
For specialist advice physicians should contact the Poisons

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

Information Service.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Water spray jet

Unsuitable extinguishing media : High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.  
Carbon monoxide  
Nitrogen oxides (NO<sub>x</sub>)

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Use water spray to cool unopened containers.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.  
Do not breathe vapours, aerosols.  
Remove all sources of ignition.

#### 6.2 Environmental precautions

Environmental precautions : Do not empty into drains.  
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

/ national regulations (see section 13).  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See chapter 8 and 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Keep away from open flames, hot surfaces and sources of ignition.  
Take precautionary measures against static discharges.  
Avoid contact with skin and eyes.  
Do not breathe vapours or spray mist.  
When using do not eat, drink or smoke.  
For personal protection see section 8.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.  
Vapours may form explosive mixtures with air.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Follow the water regulations.  
Keep only in the original container in a cool, well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place.  
Keep away from heat.  
Keep away from sources of ignition - No smoking.  
Keep at temperatures between - 7°C and 40°C.

Advice on common storage : Incompatible with oxidizing agents.

### 7.3 Specific end use(s)

Specific use(s) : Dielectric

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

Contains no substances with occupational exposure limit values.

### DNEL/DMEL

White mineral oil : End Use: DNEL, Industrial use, Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 1 mg/kg bw/d

End Use: DNEL, Industrial use, Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 2.7 mg/m<sup>3</sup>

## 8.2 Exposure controls

### Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

### Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.  
Recommended Filter type:  
ABEK-filter  
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Eye protection : Safety glasses with side-shields

Skin and body protection : Protective suit

Protective measures : Follow the skin protection plan.

### Environmental exposure controls

General advice : Do not empty into drains.  
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**hebrochemie**  
GmbH



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: clear
Odour	: slight hydrocarbon-like
Flash point	: 125 °C
Lower explosion limit	: 1 %(V)
Upper explosion limit	: 10 %(V)
Auto-ignition temperature	: > 320 °C
pH	: not applicable
Boiling point/boiling range	: > 280 °C
Vapour pressure	: <0.5 hPa at 20 °C
Density	: 0.82 g/cm <sup>3</sup> at 20 °C
Water solubility	: negligible
Viscosity, kinematic	: 3.7 mm <sup>2</sup> /S at 40 °C

#### 9.2 Other information

Explosivity : In use, may form flammable/explosive vapour-air mixture.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie  
GmbH



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No hazards to be specially mentioned.

#### 10.2 Chemical stability

The product is chemically stable.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

#### 10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

#### 10.5 Incompatible materials

Materials to avoid : Oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Acute oral toxicity  
White mineral oil : LD50: > 5,000 mg/kg  
Species: rat  
Method: OECD Test Guideline 401

Acute inhalation toxicity  
White mineral oil : LC50: > 5 mg/l  
Exposure time: 4 h  
Species: rat  
Method: OECD Test Guideline 403

Acute dermal toxicity  
White mineral oil : LD50: > 2,000 mg/kg  
Species: rabbit  
Method: OECD Test Guideline 402

##### Skin corrosion/irritation



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie  
GmbH



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

Skin irritation : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

### Serious eye damage/eye irritation

Eye irritation : The liquid splashed in the eyes may cause irritation and reversible damage.

### Respiratory or skin sensitisation

Sensitisation : This information is not available.

### Carcinogenicity

Remarks : Not classifiable as a human carcinogen.

### Aspiration hazard

Aspiration toxicity  
White mineral oil : May be fatal if swallowed and enters airways.

**Further information** : According to many years of experience, there are no known harmful effects when handled properly.  
Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish : No data available

Toxicity to fish  
White mineral oil : LC50: > 1,000 mg/l  
Exposure time: 96 h  
Species: Leuciscus idus (Golden orfe)  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates  
White mineral oil : LC50: > 100 mg/l

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie  
GmbH



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 202

Toxicity to algae  
White mineral oil : NOEC:  $\geq 100$  mg/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)

Toxicity to bacteria  
White mineral oil : NOEC:  $\geq 1,000$  mg/l  
Exposure time: 40 h  
Species: Bacteria

### 12.2 Persistence and degradability

Biodegradability : No data available

### 12.3 Bioaccumulative potential

Bioaccumulation : No data available

### 12.4 Mobility in soil

Mobility : No data available

Distribution among environmental compartments  
White mineral oil : Adsorption/Soil  
immobile

Physico-chemical removability  
White mineral oil : The product is insoluble and floats on water.

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

Additional ecological information : Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

- |                        |   |   |
|------------------------|---|---|
| Product                | : | Dispose of in accordance with local regulations.<br>Do not let product enter drains.<br>Do not dispose of with domestic refuse. |
| Packaging              | : | Do not dispose of with domestic refuse.   |
| Contaminated packaging | : | Dispose of in accordance with local regulations.  |
| Waste Code             | : | 130205 mineral-based non-chlorinated engine, gear and lubricating oils  |

### SECTION 14: Transport information

#### ADR

Not dangerous goods

#### IATA

Not dangerous goods

#### IMDG

Not dangerous goods

#### RID

Not dangerous goods

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- |                   |   |  |
|-------------------|---|--|
| Other regulations | : | The product is classified and labelled in accordance with EC directives or respective national laws.<br>Regional or national implementations of GHS may not implement all hazard classes and categories. |
|-------------------|---|--|

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

## ZPE450-K21 hebro®dielektric 2

Version: 1.6

Revision Date 03.01.2014

Print Date 04.01.2014

### SECTION 16: Other information

#### Full text of R-phrases referred to under sections 2 and 3

R65 Harmful: may cause lung damage if swallowed.

#### Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.

#### Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.