



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009

**aic**

(508) 270-1800 • (800) 238-0001

American  
**International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

## SAFETY DATA SHEET

TITANIUM DIOXIDE

**HOMBITAN AFDC, AFDC200**

01507

30057

Previous date: 11.12.2008

### Product information

**Commercial Product Name**  
HOMBITAN AFDC, AFDC200

### Use of the Substance/Preparation

Recommended use of substance/ preparation as opacifying white anatase pigment powder in food, pharmaceutical and cosmetics applications.

### Company/Undertaking Identification

SACHTLEBEN PIGMENTS OY  
Titaanitie  
28840 Pori  
FINLAND  
Telephone: +358 10 430 1000, Telefax: +358 10 430 1040

### Emergency telephone Chemtrec: 1-800-424-9300

Sachtleben Pigments Oy: Tel. +358 10 430 1000

Poison information center: Tel. +358(0)9 471 977 or +358(0)9 4711

The product contains no substances classified as hazardous to health or environment in concentrations, which should be taken into account according to directive 67/548/EEC.

### Hazardous components

CAS/EU number	Chemical name of the substance	Concentration	Warning symbol, R-phrases and other Information
13463-67-7 / 236-675-5	Titanium dioxide	≥ 99 %	
No dangerous ingredients according to Directive 2001/58/EC			

### General advice

No hazards which require special first aid measures.

### Inhalation

Move to fresh air. Consult a physician after significant exposure.

### Skin contact

Wash off with soap and plenty of water.

### Eye contact

Rinse immediately with plenty of water, also under the eyelids.

### Ingestion

Do NOT induce vomiting. Drink water as a precaution. Consult a physician if necessary.

### Suitable extinguishing media

No special requirements.

### Extinguishing media which shall not be used for safety reasons

No special requirements.

### Specific hazards during fire fighting

No special requirements.



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009

## SAFETY DATA SHEET

**HOMBITAN AFDC, AFDC200**

Previous date: 11.12.2008



(508) 270-1800 • (800) 238-0001

**American  
International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

### Special protective equipment for fire-fighters

No special requirements.

### Specific methods

The product itself does not burn. Product is inert, unflammable and incombustible.

### Personal precautions

Avoid dust formation. Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

### Environmental precautions

Avoid dust dispersion to the environment. Dust may cause the surroundings to become white. Prevent leakages from entering drains and ditches that lead to natural waterways.

### Methods for cleaning up

Use any suitable mechanical means (e.g. vacuum, sweeping), but avoid dusting during clean-up.

### Handling

Avoid dust formation during handling.

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. In case of insufficient ventilation, wear suitable respiratory equipment.

### Storage

Keep in a dry place.

Materials to avoid: none

### Exposure Limit Values

For particle size definitions see standard EN 481.

Dust concentration can be determined by collecting a sample into a filter (total amount of dust) or by using a cyclone and a filter (respirable fraction).

### Limit values in other countries

FI: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>

SE: Titanium dioxide  
NGV = 5 mg/m<sup>3</sup>, total fraction

DE: Titanium dioxide  
MAK = 3 mg/m<sup>3</sup>, 2  
MAK = 10 mg/m<sup>3</sup>, 2

AT: Titanium dioxide  
AMV = 6 mg/m<sup>3</sup>, respirable dust fraction

BE: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>

CH: Titanium dioxide  
TWA = 3 mg/m<sup>3</sup>, alveolar dust, : not temporary

DK: Titanium dioxide  
TWA = 6 mg/m<sup>3</sup>, calculated as Ti



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009



(508) 270-1800 • (800) 238-0001

**American  
International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

## SAFETY DATA SHEET

### HOMBITAN AFDC, AFDC200

- ES: Titanium dioxide  
VLA-ED = 10 mg/m<sup>3</sup>
- FR: Titanium dioxide  
VME = 10 mg/m<sup>3</sup>, calculated as Ti, : orientative exposure limits
- GB: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>, inhalable fraction  
TWA = 4 mg/m<sup>3</sup>, respirable dust fraction
- GR: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>, inhalable fraction  
TWA = 5 mg/m<sup>3</sup>, respirable dust fraction
- IE: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>, inhalable fraction  
TWA = 4 mg/m<sup>3</sup>, respirable dust fraction
- IT: Titanium dioxide
- NL: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>, : administrative
- NO: Titanium dioxide  
TWA = 5 mg/m<sup>3</sup>
- PT: Titanium dioxide  
TWA = 10 mg/m<sup>3</sup>

#### Exposure controls

##### Occupational exposure controls

##### Respiratory protection

Use filtering half mask (according to EN149) equipped with dust filter according to EN143 (P2 or P3).

##### Hand protection

Glove material: Use protective gloves according to EN374 to prevent skin contact with dust.

Break through time: > 60 min

##### Eye protection

Wear dust-proof goggles, (protection class 5) according to EN 166.

##### Skin and body protection

Protective suit

##### Environmental exposure controls

It is recommended that the exhaust air of the air conditioning is filtered off in bag filters.

#### General Information (appearance, odour)

Physical state	solid, powder
Colour	white
Odour	none

#### Important health safety and environmental information

pH	neutral
Boiling point/boiling range	not applicable
Flash point	not applicable



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009

## SAFETY DATA SHEET

**HOMBITAN AFDC, AFDC200**



(508) 270-1800 • (800) 238-0001

**American  
International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

**Explosive properties:**

Lower explosion limit

not applicable

Upper explosion limit

not applicable

**Oxidizing properties**

not applicable

Vapour pressure

not applicable

Density

3,9 g/cm<sup>3</sup>

**Solubility:**

Water solubility

practically insoluble

Fat solubility

insoluble

(solvent - oil to be specified)

Partition coefficient:

n-octanol/water

not applicable

**Viscosity:**

Viscosity, dynamic

not applicable

Viscosity, kinematic

not applicable

Relative vapour density

not applicable

Evaporation rate

not applicable

**Other data**

Melting point/range

> 1.800 °C

**Conditions to avoid**

none

**Materials to avoid**

none

**Hazardous decomposition products**

none

**Acute toxicity**

There is no data available for this product.

**Titanium dioxide:**

LD50/Oral/rat: > 10.000 mg/kg

**Irritation and corrosion**

**Skin:** No skin irritation. Prolonged skin contact may de-fat the skin and produce dermatitis.

**Eyes:** Slight physical irritation.

**Respiratory system:** Effects of breathing high concentration of respirable particles may include: cough

**Sensitisation**

There is no data available for this product.

**Long term toxicity**

Repeated dose toxicity

Material is not genotoxic.

**Human experience**

General Information

Health injuries are not known or expected under normal use. Tumours produced in rats on inhalation of very high concentrations are believed to be the result of prolonged "lung overload" and are not considered relevant to man.



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009

## SAFETY DATA SHEET

**HOMBITAN AFDC, AFDC200**

Previous date: 11.12.2008



(508) 270-1800 • (800) 238-0001

**American  
International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

### Ecotoxicity effects

#### Aquatic toxicity

There is no data available for this product.

#### Titanium dioxide:

LC0/48 h/Leuciscus idus (Golden orfe): > 1.000 mg/l

### Toxicity to other organisms

There is no data available for this product.

### Mobility

Water solubility: practically insoluble

#### Titanium dioxide:

Water solubility: insoluble

### Persistence and degradability

#### Biological degradability:

Pigments are practically not biodegradable.

### Bioaccumulative potential

Partition coefficient: n-octanol/water: not applicable

### Other adverse effects

Additional ecological information: There is no data available for this product.

### Contaminated packaging

Must be disposed of in accordance with local and national regulations. Not a hazardous waste under 2000/532/EC.

### UN-Number

### Packing group

### Land transport

Not classified as dangerous in the meaning of transport regulations.

### Sea transport

Not classified as dangerous in the meaning of transport regulations.

### Air transport

Not classified as dangerous in the meaning of transport regulations.

### Information on the warning label

#### Symbol(s)

none

### Hazardous components which must be listed on the label

#### R-phrases

none



**SACHTLEBEN**

Ref. 00864/2.2/REG\_EU/EN

Revision Date: 09.02.2009



(508) 270-1800 • (800) 238-0001

**American  
International  
Chemical, Inc.**  
135 Newbury Street  
Framingham, MA 01701

## **SAFETY DATA SHEET**

**HOMBITAN AFDC, AFDC200**

### **Other information**

Titanium dioxide is listed on AICS, DSL, MITI, TSCA

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

The product does not need to be labelled in accordance with EC directives or respective national laws.

---

### **Text of R phrases mentioned in Section 2**

#### **Training advice**

Read the safety data sheet before using the product.

#### **Recommended restrictions on use**

none

#### **Further information**

Carcinogenicity: In February 2006 IARC (International Agency for Research on Cancer) concluded "there is inadequate evidence in humans for the carcinogenicity of titanium dioxide". Based on rat inhalation studies, IARC concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of titanium dioxide". IARC's overall evaluation was that "titanium dioxide is possibly carcinogenic to humans (Group 2B)". This conclusion was based on IARC's guidelines which require such a classification if two or more independent studies in one species carried out at different times or in different laboratories or under different protocols show evidence of tumors. Sachtleben Pigments Oy disclaims any liability for loss or damage resulting from the use of these data, information or suggestions.

### **Sources of key data used to compile the Safety Data Sheet**

#### **Additions, Deletions, Revisions**

This safety datasheet complies with the requirements of Directive 2001/58/EC.