



## MATERIAL SAFETY DATA SHEET (MSDS)

### ILMENITE CONCENTRATE

(In accordance with Regulation (EC) n° 1907/2006)

## 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Name: Ilmenite Concentrate  
Trade name: Ilmenite, Ilmenite Sand  
Product code (CAS No.): 12168-52-4

### 1.2. Relevant identified uses of the mixture and uses advised against

Applications for production of welding arc electrodes and titanium oxide pigments

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

Name: Branch “Irshansk Mining and Processing Plant” of PJSC “UMCC”  
Address: vulytsia Shevchenka 1  
City, Postal Code: Irshansk, 12110  
Country: Ukraine  
Telephone: +380-4145-44305  
Fax: +380-4145-44305  
E-mail: martor@umcc.com.ua

1.4. Emergency telephone number: +380-4145-44305 (Only available during office hours)

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the mixture

This product is not classified as hazardous within the meaning of Directive 67/548/EEC

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical or Component % by weight

Ilmenite (TiFeO <sub>3</sub> )	94.5 – 98.0
Siderite (FeCO <sub>3</sub> )	0.8 – 4.0
Quartz (SiO <sub>2</sub> )	0.2 – 3.0
Marcasite (FeS <sub>2</sub> )	0.1 – 3.0
Leucoxene (TiO <sub>2</sub> )	0.1 – 1.0

The product does not contain substances that are hazardous for health or the environment in accordance with Annex II of Regulation (EC) no. 1907/2006

## 4. FIRST AID MEASURES

### 4.1. Contact with eyes

Hold eyelid open and flush with plenty of clean water for at least 15 minutes. Seek medical attention if soreness persists.

### 4.2. Contact with skin

Wash with soapy water. If irritation develops, seek medical advice. Launder clothing before re-use.

### 4.3. Inhalation

Move from the area of exposure to a ventilated area. If any irritation is felt or respiratory problems persist, seek medical attention.

### 4.4. Swallowed

Although they are not toxic substances, in the event of accidental swallowing it is advisable to see a doctor. Wash the mouth out with water ensuring the mouthwash is not swallowed. Give one or two glasses of water to drink.

## 5. FIRE-FIGHTING MEASURES

The products are non-flammable. In the event of fire, it is not necessary to use special means of fire extinguishing.



## 6. ACCIDENTAL RELEASE MEASURES

Collect or vacuum up the product, avoiding generating dust.  
Avoid spilling the product in water courses and drainage systems.  
The use of safety gloves, goggles and masks is recommended.

## 7. HANDLING AND STORAGE

### 7.1. Handling

In processes in which there is direct contact with the material or concentrations of dust above the maximum limit stipulated in legislation, appropriate, approved protective masks, gloves and safety goggles must be worn. If there is a high concentration of dust, ventilation or vacuum systems must be fitted. And washing before eating, drinking, applying cosmetics or smoking is advisable to minimize dust inhalation from hands.

### 7.2. Storage

The material must be stored in silos or sacks that are properly sealed to prevent the dust from leaking out. The storage areas must be ventilated.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1. Exposure

Depending on the end use of the materials, the user must carry out the necessary measures in accordance with legislation, in order to control the exposure to which the people who handle these products are subjected.

### 8.2. Personal protection

For applications in which there is direct contact with the products, it is compulsory to use appropriate, approved personal protection. Dust masks must be used to protect the respiratory tract, protective goggles must be used to protect the eyes and gloves and work clothes must be used to protect the skin.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	Appearance:	Black sand
Molecular Formula:	TiO <sub>2</sub> *FeO	Molecular Weight:	79.87 (TiO <sub>2</sub> )
Specific gravity:	4.12 - 4.17	Bulk Density:	2 130 – 2 240 kg/m <sup>3</sup>
pH (20°C):	Not soluble	Mohs hardness:	5
Melting point:	1 365 °C	Flammability:	Not flammable
Odor:	Odorless	Solubility in Water:	Insoluble
Autoignition:	Not self-igniting	Danger of Explosion:	None present

## 10. STABILITY AND REACTIVITY

The materials are inert and chemically stable under normal usage conditions.

## 11. TOXICOLOGICAL INFORMATION

Not classified as toxic or hazardous products.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

No information is available regarding the ecotoxicity of the substances present.

### 12.2. Persistence and degradability

No information is available about persistence and degradability of the product.

### 12.3. Bioaccumulative potential

No information is available regarding the bioaccumulation of the substances present.



#### **12.4. Mobility in soil**

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

#### **12.5. Results of PBT and vPvB assessment.**

No information is available about the results of PBT and vPvB assessment of the product.

#### **12.6. Other adverse effects.**

No information is available about other adverse effects for the environment.

### **13. DISPOSAL CONSIDERATIONS**

#### **13.1. Waste**

As it is inert waste, it can be disposed of in authorized dumps in accordance with the legislation in force.

### **14. TRANSPORT INFORMATION**

It must be transported in sacks or big bags that are properly closed, or in covered dumper trucks to prevent the material from leaking out.

Not regulated under IATA Dangerous Goods Regulations (Air) and the goods are classified as NOT RESTRICTED as per IATA DGR 56th Edition.

### **15. REGULATORY INFORMATION**

According to EC-Dir. 67/548, as amended, the material is not regarded as a hazardous substance with regards to classification, packaging and labelling.

The regulations pertaining to radiological protection vary from country to country. It is the responsibility of the buyer to ensure that those regulations are met in accordance with the relevant legislation

### **16. OTHER INFORMATION**

This safety data sheet is not a guarantee of the quality or specific properties of the products. The information provided is based on the information obtained from raw materials and our knowledge about the products at the date of its publication, which is provided in good faith.

SE “UMCC” accepts no liability for any possible inaccuracy or incomplete information, as well as the consequences that derive from unsuitable use of the product or any use other than that for which the product was designed. The user is not exempted from finding out and applying all the regulations that apply to his/her business.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.