

SAFETY DATA SHEET

According to Regulation (EC) No 2020/878

Issue Date : 30.10.2018
Form No: GBF202211110962

Revision Date : 11.11.2022
Revision no : 01



Product Name: **ZINC OXIDE FEED GRADE**

1.PRODUCT AND COMPANY IDENTIFICATION

Product Name ZINC OXIDE FEED GRADE

Chemical Family : Metal.

Substances in nanoforms : None

Identified Use : Industrial use.

Uses advised against : No specific uses advised against are identified.

Details of the manufacturer and supplier of the safety data sheet :

Company name: Meb Metal ve Bileşikleri San. Tic. A.Ş.

Address : Barış Mah. 1804/2 Sok.No:24 Gebze/KOCAELİ /TÜRKİYE

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2.HAZARDS IDENTIFICATION

Classification of the substance or mixture :

Classification according to Regulation (EC) No 1272/2008 (CLP):

Aquatic Acute 1;H400 **GHS09**
Aquatic Chronic 1;H410



Hazard Statements (H) :

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long-lasting effects.

Precautionary Statements (P):

P260 : Do not breathe dusts or fumes.

P273 : Avoid release to the environment.

P391 : Collect spillage.

P501 : Dispose of contents/container in accordance with local regulations.

Potential Hazards :

Human Health : Dusts are irritating to eyes, skin and respiratory sistem; causes nausea, headache and shortness of breath.

Physical hazards : Not classified.

Environment : Very toxic to aquatic life with long-lasting effects.

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Chronic Hazards : Not available.

Label Elements :

Label In Accordance With (EC) No. 1272/2008 GHS

Signal Word : Warning.

GHS Signal code : GHS09.

Hazard Determining Components : Zinc oxide.

See hazard pictograms, H and P Statements above.

Other Hazards : None.

This product does not contain any PBT or vPvB substances.

Endocrine disrupting properties : None.

3.COMPOSITION/INFORMATION ON INGREDIENTS

Mixture: consisting of the following components:

Components	Cons. % (w/w)	EC no	CAS no	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Zinc oxide	>90	215-222-5	1314-13-2	Aquatic Acute 1;H400 Aquatic Chronic 1;H410

4. FIRST AID MEASURES

Description of first aid measures :

General : Remove all contaminated clothes. Do not breathe. Get medical attention.

Inhalation: Remove to fresh air. Get medical attention if any discomfort continues.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention.

Skin contact: Wash skin thoroughly with soap and water.

Ingestion: Do not induce vomiting. Rinse mouth with plenty of water. Drink a few glasses of water or milk. Get medical attention.

Most important symptoms and effects, both acute and delayed :

Inhalation : Inhalation of dusts can cause irritative action on mucous membranes. Symptoms include, coughing, shortness of breath, headache or nausea.

Ingestion : Causes irritation of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include burning, choking, nausea, vomiting and pain.

Skin contact : May cause skin irritation. Symptoms include itching, redness, inflammation and/or swelling of exposed tissues.

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Eye contact : May cause eye irritation. Symptoms include eye burns, watering eyes.

Indication of any immediate medical attention and special treatment needed : Eyes, skin or respiratory system irritation.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Specific Hazards : Keep away from oxidizing agents. Contact with combustible and organic materials may cause fire. Mixtures of fine dusts with air can be explosive.

Extinguishing Media: Water, dry chemicals, carbondioxide or foam.

Unsuitable Extinguishing Media : Water jet.

Special hazards arising from the substance or mixture: Carbon, zinc and various metal oxides.

Advice for fire-fighters : Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions,protective equipment and emergency procedures: Wear protective clothing as described in section 8 of this safety data sheet. Ensure adequate air ventilation. Avoid formation of dusts or mists. Avoid eyes and skin contact. Do not breathe dusts or mists. Use spark-proof tools and explosion proof equipment.

Methods and material for containment and cleaning up : Pick up with vacuum or sweep up and store in an appropriate waste disposal container. Prevent entry into sewers, basements or confined areas.

Environmental precautions : Keep spills away from drinking water supplies. Prevent entry into sewers, basements or confined areas. Spillages or uncontrolled discharges into watercourses must be alerted to the Environmental Agency or other appropriate regulatory body.

7.HANDLING AND STORAGE

Precautions for safe Handling: Provide adequate ventilation. Protect from moisture, water. Prevent formation of dusts. Avoid eyes and skin contact. Observe good chemical hygiene practices. Do not eat, drink or smoke during use. Provide eyewash stations or safety showers.

Conditions for Safe Storage, including any incompatibilities: Store at moderate temperatures in dry, well ventilated area between 5-35°C away from food and food products. Keep in original container. Keep away from incompatibles such as oxidizing agents,combustible materials,strong acids and alkalis. Keep away from heat sources and open flames.

Specific end use(s) : The identified uses for this product are detailed in Section 1.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters :

Occupational Exposure Limits :

Zinc oxide **TWA** : 5 mg/m³ (respirable dust) 15 mg/m³ (total dust)

DNEL (Derived No Effect Level) : Zinc

Oxide :

DNEL (worker-inhalation- long term-local effect) : 0.5 mg/m³

DNEL (worker-inhalation- long term-systemic effect) : 5 mg/m³

DNEL (worker-dermal- long term-systemic effect) : 83 mg/kg

DNEL (general population -inhalation- long term-systemic effect) : 2.5 mg/m³

DNEL (general population-dermal- long term-systemic effect) : 83 mg/kg **DNEL**

(general populational- long term-systemic effect) : 0.83 mg/kg

Exposure controls :

Engineering measures : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of dusts below their respective threshold limit value. Avoid breathing dusts and mists. The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Do not eat or drink while working. Avoid contact with the eyes and the skin. Provide eyewash stations or safety showers.

Personal Protection :

Eye Protection: Safety glasses or goggles.

Hands Protection : Protective PVC gloves.

Skin and Body Protection: Protective work clothing.

Respiratory Protection : Use suitable approved respiratory mask or protective device (P3 filtered mask is appropriate) .

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Solid.

Colour : Light yellow.

Odour : None.

pH (100 g/L)(20°C) : 7-8. **Melting**

Point : 1975°C (3587 F) **Flash**

Point : Not applicable.

Auto-Ignition Temperature : Not applicable.

Explosion Limits : Not available.

Specific Gravity : 5.5 g/cm³.

Solubility : 2.9 mg/L.

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Information with regard to physical hazard classes : None.

Other safety characteristics : Mixtures of fine dusts with air can be explosive.

10. STABILITY AND REACTIVITY DATA

Chemical Stability : Stable under prescribed storage and normal use conditions.

Reactivity : Keep away from incompatible materials.

Possibility of hazardous reactions : No information required.

Conditions to avoid : Excessive heat and open flames, humidity, water. Formation of dust.

Incompatibility :

Incompatible materials : Avoid strong acids, alkalis and strong oxidizers.

Hazardous Decomposition or By Products: On heating/burning: release of carbon, zinc and various metal oxides.

11. TOXICOLOGICAL INFORMATION

Information on hazard classes as defined in Regulation (EC) No 1272/2008 :

Acute toxicity : Not toxic.

No classification for toxicity. Based on available data and calculations, the classification criteria are not met.

Zinc oxide :

LD₅₀ oral rat : > 5000 mg/kg

LD₅₀ dermal rat : > 2000 mg/kg

LC₅₀ inhalation rat : > 5.7 mg/L/4 h

ATE_{mix} oral : >5000 mg/kg

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) : Not available.

Specific target organ toxicity – single exposure :

STOT – Single exposure : None.

Specific target organ toxicity – repeated exposure :

STOT – Repeated exposure : None.

Aspiration Toxicity : None.

Information on likely routes of exposure : Inhalation, eyes and skin contact.

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Symptoms related to the physical, chemical and toxicological characteristics :

Inhalation : Inhalation of dusts can cause irritative action on mucous membranes . Symptoms include coughing, shortness of breath, headache or nausea.

Ingestion : Causes irritation of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include burning, choking, nausea, vomiting and pain.

Eye contact : May cause eye irritation. Symptoms include eye burns, watering eyes.

Skin contact : May cause skin irritation. Symptoms include itching, redness, inflammation and/or swelling of exposed tissues.

Sensitization : No sensitizing effects known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure :

Chronic Toxicity : No chronic effects observed with this product.

Information on other hazards :

Endocrine disrupting properties : None.

12. ECOLOGICAL INFORMATION

Ecotoxicity : Very toxic to aquatic life with long-lasting effects. Always comply with federal, state, and local environments.

Zinc powder :

LC₅₀ : 0.169 mg/L /96 h (Fish)

EC₅₀ : 0.147 mg/L /48 h (Daphnia magna)

NOEC : 0.014-0.400 (Daphnia magna)

PNEC (Predicted No Effect Concentration) :

Zinc Oxide :

PNEC (Fresh water) : 20.6 µg/L

PNEC (Marine water): 6.1 µg/L

PNEC (Sediment-fresh water) : 117.8 mg/L

PNEC (Sediment-marine water) : 56.5 mg/L

PNEC (STP) : 100 µg/L

PNEC (Soil) : 35.6 mg/kg

Secondary poisoning : No potential for bioaccumulation.

Toxicity : No data available.

Persistence and degradability : Biodegradation is not applicable to metals/inorganic substances.

Tests are not to be conducted if the substance is inorganic.

Bioaccumulative potential : Bioaccumulation not expected. Due to homeostatic control mechanisms, bioaccumulation is not relevant to essential elements in general and to zinc in particular.

Mobility in soil :

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Product Name: **ZINC OXIDE FEED GRADE**

Kp for solid particulate matter and water (Kpsusp): 110000 l/kg (log value: 5.04) (ECB 2008)

Kp for water and sediment (Kpsed); 73000l/kg (log value:4.86) (ECB 2008)

Kd for marine waters is 6010 l/kg (log value: 3.78)

Kd for solids-water in soil is 158.5 l/kg (log value: 2.2)

Results of PBT and vPvB assessment : This product does not contain any PBT or vPvB substances.

Endocrine disrupting properties : None.

Other adverse effects : No information required.

13. DISPOSAL CONSIDERATIONS

General information : This product is hazardous waste.

Waste treatment methods : Dispose according to federal, state and local official regulations. Do not discharge into drains or rivers.

14. TRANSPORT INFORMATION

General Classification (ADR/RID, IMDG, IATA/ICAO) :

UN No : UN 3077

Proper Shipping Name : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class : 9

Danger code : 90

Packing group : III

EmS Code : F-A,S-F **Tunnel code** : E

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Environmental Hazards :

Environmentally hazardous substance/Marine pollutant : Yes (Zinc oxide).



15. REGULATORY INFORMATION

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

EU Legislation :

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Approved Code of Practice :

Safety Data Sheets for Substances and Preparations.

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Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes :

Workplace Exposure Limits EH40.

Chemical Safety Assessment : A Chemicals Safety Assessment has not been carried out.

The regulatory information is not intended to be comprehensive. Other local regulations may apply to this material.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) has been fully issued according to the CLP and REACH regulations based on the information received from the product owner.

Safety Data Sheet Issued By : Chemical Engineer Birgul Ankaralı (info@okyanuschem.com)

Date Issued : 30.10.2018

Revision Date : 11.11.2022

Contact Person : Evren KUMCU : info@mebmetal.com.tr

Safety Data Sheet has been revised due to regulation change.

Hazard Statements in Article 3 :

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long-lasting effects.

Abbreviations in SDS :

CLP:Classification, Labelling and Packaging

GHS:Global Harmonised System

CAS no: Chemical Abstracts Service registry number of the material

EC no (EINECS no) : European Community number for chemicals

TWA : A Time-Weighted Average Exposure Limit

IARC : : The International Agency for Research on Cancer

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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