Material Safety Data Sheet

Trade Name: Pars Zinc Dust Superfine

Version: 010 SG Date of Printing: 30.10.2006

1.) Identification of the substance/preparation and company

Product Details

Trade Name: Pars ZD Superfine

Use

Anti corrosive foundation, reducing agent in chemical reactions

Identification of the manufacturer/supplier

Pars Zinc Dust Manufacturing Co.

Address

No. 60 Golfam Street

Afrigha Avenue

Tehran 191567341

IRAN

Telephone: (+21) 22055253 Fax: (+21) 22051596

Information provided by / telephone

N. Razagh / (+21) 22055253

Emergency telephone number

(+21) 22024214

2.) <u>Composition / Information of Ingredients</u>

Chemical Characterization

ZINC DUST

Substance / Product Identification

Index no. 030-002-00-7 CAS no. 7440-66-6 EC no. 231-175-3

3.) <u>Hazards Identification</u>

Classification

N; R50/53 Very toxic to aquatic organisms, may cause long-

term adverse effects in the aquatic environment.

Hazardous Symbols

N Dangerous for the environment

R Phrases

50/53 Very toxic to aquatic organisms, may cause long-

term adverse effects in the aquatic environment.

4.) First Aid Measures

General Information

In case of persisting adverse effects consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After Inhalation

Ensure supply of fresh air. Take medical treatment.

After Skin Contact

When in contact with the skin, clean with soap and water.

After Eye Contact

Separate eyelids, wash the eyes thoroughly with water (15min.). Eye treatment by an oculist.

After Ingestion

Induce vomiting if patient is conscious, seek medical advice. Rinse out mouth and give plenty of water to drink. Administer activated charcoal.

Advice to Doctor

Symptoms: Fever; Nausea; Vomiting

5.) Fire-Fighting Measures

Suitable Extinguishing Media

Metal fire powders; Carbon Dioxide; Sand

Extinguishing Media that must not be used for safety reasons

Water; Foam

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

In the event of fire, the following can be released: Zinc Oxides

Special Protective Equipment for Firefighting

In case of combustion use a suitable breathing apparatus.

Other Information

Collect contaminated firefighting water separately, must not be discharged into the drains.

6.) Accidental Release Measures

Personal Precautions

Refer to protective measures listed in sections 7 and 8. Avoid dust formation. Keep away sources of ignition.

Environmental Precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Pick up mechanically. Avoid raising dust. Send in suitable containers for recovery or disposal.

7.) Handling and Storage

Handling

Advice on Safe Handling

- Avoid the formation and deposition of dust. If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

Advice on Protection Against Fire and Explosion

- Keep away from sources of heat and ignition. Take precautionary measures against static charges.

Storage

Requirements for storage rooms and vessels Keep in original packaging, tightly closed.

Advice on Storage Assembly

Do not store together with:

Acids

Bases

Keep away from water.

Do not store with combustible materials.

Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

8.) Exposure controls / personal protection

Exposure Limit Values

ZINC OXIDE

Cas no. 1314-13-2 EC no. 215-222-5

Occupational Exposure Standards (OESs) / EH40

Zinc Oxide, fume

 $\begin{array}{ccc} TWA & 5 & mg/m^3 \\ STEL & 10 & mg/m^3 \end{array}$

DUST

OES/EH40

Total inhalable dust

TWA 10 mg/m^3

OES/EH40

Respirable Dust

TWA 4 mg/m^3

Personal Protective Equipment

Respiratory Protection

If workplace exposure limits are exceeded, a respirations protection approved for this particular job must be worn.

Respiratory filter (part): P2

Hand Protection

In case of intensive contact wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Eye Protection

Safety Glasses (EN 166)

Skin Protection

Clothing as usual in the chemical industry.

General protective and hygiene measures

Do not eat, drink or smoke during work time. After work time and during work intervals the affected skin areas must be thoroughly cleaned. Store work clothing separately. Do not inhale dust.

9.) Physical and Chemical Properties

General Information

Form Powder
Color Grey
Odor Odorless

Information Health, Safety and Environmental Information

Changes in Physical State

Type Melting Point
Value 420 Celsius
Type Boiling Point
Value 906 Celsius

Flashpoint

Remarks not applicable

Ignition Temperature

Value not determined Reference Temperature 20 Celsius

10.) Stability and reactivity

Materials to Avoid

Acids; Bases; Reacts strongly with water.

Hazardous Decomposition Products

ZnO-fume can be generated during thermal processing.

11.) Toxicological information

Experience in Practice

Inhalation of dusts may irritate the respiratory tract.

Zinc is present in drugs (Medication) in small amounts up to 25 mg. Amounts in grams can cause serious damage to health. Inhalation of zinc oxide fumes can cause fever, muscle pains, shivering and nausea. In general these troubles last only 24 hours without any after-effect (zinc fever).

12.) Ecological information

General Information / Ecology

Do not discharge into the drains or waters and do not store on public depositories.

13.) <u>Disposal considerations</u>

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

14.) Transport Information

Landing Transport ADR/RID

Class 9 Classification Code M7

Packaging Group III
Hazard id. No. 90
Label 9
UN number 3077

Technical name Environmentally hazardous substance, solid,

n.o.s.

Danger Releasing Substance ZINC POWDER - ZINC DUST

Marine Transport IMDG

Class 9 Packaging Group III UN number 3077

Proper Shipping name Environmentally hazardous substance, solid,

n.o.s.

Danger Releasing Substance ZINC POWDER – ZINC DUST

EmS F-A, S-F

Label 9

Air Transport ICAO/IATA

Class 9
Packaging Group III
UN number 3077

Proper Shipping name Environmentally hazardous substance, solid,

n.o.s.

Danger releasing substance ZINC POWDER – ZINC DUST

Label

15.) Regulatory Information

Labeling in Accordance with EC directives

The product is classified and labeled in accordance with EC Directive 67/548/EC.

"EC-label"

EC no. 231-175-3

Hazard Symbols

N Dangerous for the environment

R phrases

50/53 Very toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic

environment.

S phrases

This material and its container must be

disposed of as hazardous waste.

Avoid release to the environment. Refer to

special instructions/Safety data sheets.

Restriction of occupation.

Observe employment restrictions for young people.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Annex I, part 2, category 9a

16.) Other Information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

EC Directive 2001/58/EC as amended in each case.

EC Directive 2000/39/EC as amended in each case.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.