# **MATERIAL SAFETY DATA SHEET**

## 1. IDENTIFICATION

Product name Chromite Sand

Other name Chrome Ore, Chromite Ore

Uses A raw material for the manufacturer of various chemicals,alloys

and refractories

Chemical Family No Data Available

Chemical formula Cr.Fe.O

Chemical Name Chromite Sand

Product Description No Data Available

## Contact details of the supplier of this Safety Data Sheet

ZHENGZHOU HAIXU ABRASIVES CO.,LTD

https://chromitesands.com/

Telephone:+8637160305639

Fax:+8637160305637

## **Emergency Contact Details**

Emergency telephone number +8615838373120

# 2. HAZARD IDENTIFICATION

Poisons Schedule Not Scheduled

Hazard Calssification Not hazardous according to the criteria of the globally harmonised system of

Classification and Labelling of chemicals(GHS)

Hazard Categories Acute Hazard to The Aquatic Environment

Signal Word Warning

Hazard Statement H402 Harmful to squatic life

Precautionary Statement P273 Avoid release to the environment

# 3.COMPOSITION/INFORMATION ON INGREDIENTS

# Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Chromite sand	No Data Available	1308-31-2	100.0%

# 4. FIRST AID MEASURES

Description of necessary measures according to routes if exposure

Swallowed Immediately give a glass of water, first aid is generally not required. If in doubt or symptoms

develop, seek medical attention

Eye Immediately flush eyes with plenty of water for 15minutes, holding eyelids open. If irritation

develops/persists, seek medical attention.

Skin Remove Contaminated clothing, wash affected area with soap and plenty of water.if irritation

persists, seek medical attention.

Inhaled Remove victim from exposure to fresh air.If not breathing,apply artificial respiration.if

breathing is difficult, give oxygen, seek medical attention if effects persist.

Advice to Doctor Treat symptomatically based on judgement of doctor and individual reactions of patient.

Medical Conditions The IARC has stated "there is sufficient evidence in humans for the carcinogenicity of Chromium

Aggravated by Exposure compound as encountered in chromate production, chromate pigment production, and

chromium palting industries."However there is no similar evidence for the carcinogenic risk related to the production of ferrochromium. Specific reliable epidemiological studies of populations of workers exposed to chromium in various chemical forms during production of feerochromium, stainless steels and other chromium-containing alloys have not shown any excess of risk of respiratory cancers related to chromium and other components of

ferrochromium.

Systemic Effects Well-defines long term systemic effects have not been described from exposure to chrome ore.

# 5. FIRE FIGHTING MEASURES

General Measure Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate

ignition sources.move fire exposed containers from fire area if it can be done

without risk

Flammability Product is a non-flammable solid

Extinguishing Media In case of fire, use appropriate extinguishing media most suitable for surrounding free conditions

Fire and explosion hazard No-combustible solid, Material does not burn nor will support combustion

Hazardous Products of No-combustible solid, avoid generating dust. Incompatible materials are unknown. Fumes may be

Combustion produced during chemical or melting operations. In these fumes, chromium may be present in

oxidised forms such as hexavalent chromium compounds or in other unidentified forms. Some

of these hexavalent chromium compounds are generally suspected of being respiratory carcinogens. Note that chromite(Cr3) contained in chrome ore may in normal use be converted

to hexavalent chromium(Cr6). Hexavalent chromium compounds are considered carcinogens.

Special Fire Fighting Do NOT allow fire fighting water to reach waterways,drains or sewers. Store fire fighting water

Instructions for treatment.

Personal Protective Equipment Fire fighters should wear a positive-pressure self-contained breathing apparatus(SCBA) and

protective fire fighting clothing(including fire fighting helmet,coat,trousers,boots and gloves). Clear fire area of all non--emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done

without risk.

Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water

for treatment.

Flash Point No Data Available

Lower Explosion Limit

No Data Available

Upper Explosion Limit

No Data Available

Auto Ignition Temperature

No Data Available

Hazchem Code

No Data Available

# **6. ACCIDENTAL RELEASE MEASURES**

General Response Procedure Avoid accidents, clean up immediately. May be slippery when split. Eliminate all sources of

ignition.Increase ventilation.Avoid generating dust.Stop leak if safe to do so.Isolate the

danger area. Use clean, non-sparking tools and equipment.

Clean Up Procedures Contain and sweep/shovel up spills with dust binding material of use an industrial vacuum

cleaner. Transfer to a suitable, labelled container and dispose of promptly.

Containment Stop leak if safe to do so. Isolate the danger area.

Environment Precautionary Do NOT let product reach drains or waterways. If product does enter a waterway, advise the

Measures environment protection Authority or your local Waste Management.

Evacuation Criteria Evacuate all unnecessary personnel

Personal Precautionary Personnel Involved in the clean up should wear full protective clothing

Measures

#### 7. HANDLING AND STORAGE

Handling Ensure and eye bath and safety shower are available and ready for use

Observe good personal hygiene practices and recommended procedures.

Washed thoroughly after handling. Chrome ore is a heavy, dense material. It is important that chrome ore must be free of all moisture prior to usage in high temperature applications. Any moisture in the material should be regarded as an explosion hazard. Avoid contact with

eyes, skin and clothing. Do not inhale product dust/fumes.

Storage Store in a cool,dry,well-ventilated area.Keep containers tightly closed when not in use.Inspect

regularly for deficiencies such as damage or leaks

Protect against physical damage. Store away from incompatible materials as listed in section 10. Due to its lack of reactivity under normal conditions as well as during exposure to heat, chrome ore does not need any special regulatory measures or precautions. This product is not classified dangerous for transport according to the Chinese Code for the transport of

Dangerous Goods by Road and Rail.

Container Store in original packaging as approved by Manufacturers

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General The exposure standards are guides to be used in the control of occupational health hazards.All

atmospheric contamination should be kept to as low a level as is workable. These exposure

standards should not be used as fine dividing lines between safe and dangerous

concentrations of chemicals. They are not a measure of relative toxicity.

Exposure Limits No Data Available

Biological limits No information available on biological limit values for this product.

Engineering Measures During normal use(eg.chemical or melting operations), dust and fumes are generated.A

system of local and/or general exhaust is recommended to keep employee exposures as low

as possible.Local exhaust ventilation is generally preferred because it can control the

emissions of the contaminant at its source, preventing dispersion of it into the general work

area.

Personal Protection Equipment RESPIRATOR: Wear a P2 particulate respirator when handling the product)

EYES:Safety glasses with side shields

HANDS: Neoprene gloves

CLOTHING: Long-sleeved protective coveralls and safety footwear

Work Hygienic Practices No Data Available

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance Crystalline sand or Fine Dust

Odour Odourless

Colour Black or Brown

pH No Data Available

Vapour Pressure No data Available

Relative Vapour Density No data Available

Boiling Point 2672℃

Melting Point  $2000^{\circ}$ C

Freezing Point No data Available

Solubility Insoluble 25 ℃

Specific Gravity 4.1-5.1

Flash Point No Data Available

Auto Ignition Temp No Data Available

Evaporation Rate No Data Available

Bulk Density No Data Available

Corrosion Rate No Data Available

Decomposition Temp No Data Available

Density No Data Available

Specific Heat No Data Available

Molecular Weight No Data Available

Net Propellant Weight No Data Available

Octanol water coefficient No Data Available

Particle Size No Data Available

Partition Coefficient No Data Available

Saturated Vapour Concentration No Data Available

Vapour Temperature No Data Available

Viscosity No Data Available

Volatile Percent Not Volatile

VOC Volume <1%

Additional Characteristics No Data Available

Fast or Intensely Burning No Data Available

Characteristics

Flame Propagation or Burning No Data Available

Rate of Solid Materials

Non-Flammables That could No Data Available

Contribute Unusual Hazzrds to

A fire

Properties That Way Initiate or

No Data Available

Contribute to Fire Intensity

Reactions That Release Gases

No Data Available

Or Vapours

Release of Invisible Flammable

No Data Available

Vapours and Gases

## 10. STABILITY AND REACTIVITY

Chemical Stability Product is stable under normal conditions of use, storage and temperature.

During chemical processes or once molten, chrome ore produces fumes

Conditions to Avoid Avoid excessive hear, direct sunlight, generating dust, moisture, static discharges, open

flame and high temperatures

Materials to Avoid WARNING: Avoid or control reaction with peroxides. All transition metal peroxides should be

considered as potentially explosive.For example transition metal complexes of alkyl hydroperoxides may decompose explosively.The pi-complexes formed between

chromium, vandium and other transitional metals (haloarene-metal complexes) and mono or poly-fluorobenzene show extreme sensitivity to heat and are explosive. Avoid Reaction

with borohydrides or cyanoborohydrides

Hazardous Decomposition

Products

Fumes may be produced during chemical or melting operations. In these fumes, chromium  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

may be present kn oxidised forms such as hexavalent chromium compounds or in other

Unidentified forms. Some of these hexavalent chromium compounds are generally

Suspected if being respiratory carcinogens. Note that Chromite(Cr3) contained in chrome ore may in normal use be converted to hexavalent chromium (Cr6). Hexavalent chromium

compounds are considered carcinogens.

Hazardous Polymerisation Hazardous Polymerisation will not occur.

## 11.TOXICOLOGICAL INFORMATION

General Information

The IARC has stated "There is sufficient evidence in humans for the carcinogenicity of chromium(VI) compounds .As encoutered in chromite production, chromite pigment production, and chromium plating industries" .However there

Is no similar evidence for the carcinogenic risk related to the production of ferrochromium. Specific reliable. Epidemiological studies of populations of workers exposed to chromium in various chemical forms during production of ferrochromium, stainless steels and other chrominum-containing alloys have not shown any excess of risk of respiratory cancers related t chromium and other components of ferrchromium.

Systemic Effects

Well-defined long term systemic effects have not been described from exposure to chrome ore.

EyeIrritant

Direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness(as with windburn). Slight abrasive damage may also result. The material may produce foreign body irritation in certain individuals.

Ingestion

The material may be damaging to the health of the individuals, following ingestion, especially where pre-existing organ(eg liver or kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (diseases, ill health). Gastrointestinal tract discomfort may produce nausea and vomiting.

Inhalation

Inhalation of freshly formed metal oxide particles sizes below 1.5microns and generally between 0.02 to 0.05 microns may result in "metal fume fever", symptoms may be delayed up to 12 hours and begin with the sudden onset of thirst and sweet metallic or foul taste in the mouth. Other symptoms include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalised feeling of malaise. Mild to severe headache, nausea, occasional vomiting, fever or chills, exaggerated mental activity, profuse sweating, diarrhoea. excessive urination and prostration may also occur. Tolerance to the fumes develops rapidly, but is quickly lost.

SkinIrritant

Open cuts, abraded or irritated skin should not exposed to this material. Entry into the blood stream through for example cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine skin prior to the use of this material and ensure that any external damage is suitable protected.

Carcinogen Category

No Data Available

# 12.ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic organisms in very low concentrations. Fish food organisms are very

sensitive to low levels of chromium

Chromium is toxic to fish although less so in warm water.

Persistence/Degradability

No information available on persistence/degradability for the product

Mobility No Information available on mobility for this product.

Insoluble in Water

Environmental Fate Avoid contaminating waterways, drains and sewers.

Bioaccumulation potential No information available on bioaccumulation for this product

Environmental Impact No Data Available

#### 13.DISPOSAL CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations.

All empty packaging should be disposed of in accordance with local, State, and Federal

Regulations or recycled/reconditioned at an approved facility.

Special Precautions Contact a specialist disposal company or the local waste regulator for advice.

For Land Fill The processing of chrome ore may lead to the production of chromium containing waste

products such as flue dust, slurries etc, which are usually recycled.

If this is not the case, then they should be disposed of in authorised land-fills, adapted to the

level of hazard posed by the waste.

## 14.TRANSPORT INFORMATION

Proper shipping name Chromite Sand

UN CODE None

PACKING GROUP None

HSNO Classifications (DOT Classifications) 9.1D

CAS Number 1308-31-2
Proportion 100.0%

Land Transport Not regulated for transport of dangerous goods

Air Transport Not regulated for transport of dangerous goods

Sea Transport Not regulated for transport of dangerous goods

Special Provisions for Transport No Data Available

## **15.REGULATORY INFORMATION**

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

This product has been classified in accordance with the controlled products regulations and the MSDS contains all the information required by the controlled products regulations.

# **16.OTHER INFORMATION**

The information provided in this safety data sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use,

postrecession, storage, transmigration, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for sun material used in combination with any other materials or in any process.