

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product name	chrome flour
Other name	Chrome Ore,Chromite Ore
Uses and refractories	A raw material for the manufacturer of various chemicals,alloys
Chemical Family	No Data Available
Chemical formula	Cr.Fe.O
Chemical Name	chrome flour
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 Classification	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 aquatic life
Precautionary Statement	P273	Avoid release to the environment

3.COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
chrome flour	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 Combustion	No-combustible solid,avoid generating dust.Incompatible materials are unknown.Fumes may be 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 Instructions	Do NOT allow fire fighting water to reach waterways,drains or sewers.Store fire fighting water 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 or 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 Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the environment protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing

7. HANDLING AND STORAGE

Handling	<p>Ensure eye bath and safety shower are available and ready for use</p> <p>Observe good personal hygiene practices and recommended procedures.</p> <p>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.</p>
Storage	<p>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</p> <p>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.</p>
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 °C
Melting Point	2000 °C
Freezing Point	No data Available
Solubility	Insoluble 25 °C
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
Potential for Dust Explosion	Dust suspended in air could cause dust explosions
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 Hazards to	
A fire	
Properties That May 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 heat, 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, vanadium 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 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 (Cr ₃) contained in chrome ore may in normal use be converted to hexavalent chromium (Cr ₆). Hexavalent chromium compounds are considered carcinogens.
Hazardous Polymerisation	Hazardous Polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<p>The IARC has stated “There is sufficient evidence in humans for the carcinogenicity of chromium(VI) compounds .As encountered in chromite production,chromite pigment production,and chromium plating industries” .However there</p> <p>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 chromium-containing alloys have not shown any excess of risk of respiratory cancers related t chromium and other components of ferrchromium.</p>
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	<p>Harmful to aquatic organisms in very low concentrations.Fish food organisms are very sensitive to low levels of chromium</p> <p>Chromium is toxic to fish although less so in warm water.</p>
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	chrome flour
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, post-recession, 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 any material used in combination with any other materials or in any process.