

Safety Data Sheet

Friction Materials

Revision No.1

Revision date: 1 May 2018

*Prepared according to UN GHS



1. Identification of the product and company

Product Name:	AD445
Recommended Use:	Friction Material for Vehicle Brakes
Manufacturer/supplier:	SHANDONG GOLD PHOENIX CO.,LTD
Phone:	+86 0531 81173810
Fax:	+86 0534 2119895
Emergency phone (24h) :	+86 0534 2119857
Postal code:	253600
Street address:	999 Fule Road, Leling City Shandong Province, China
Homepage:	www.chinabrake.com
E-mail:	zhenmh@chinabrake.com

2. Hazards identification

Classification Hazard classification according to GHS

Label elements

Hazard Symbols:	
Signal Word:	WARNING

Hazard Statements

H317	May cause an allergic skin reaction
H362	May cause harm to breast-fed children
H373	May cause damage to lungs and skeletal fluorosis through prolonged or repeated exposure

Precautionary Statements

※ General

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read Label before use repeated exposure

※ Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray
P262	Do not get in eyes, on skin, or on clothing
P263	Avoid contact during pregnancy and while nursing
P264	Wash hands, face and all exposed skin thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required

※ Response

P305 + P351	If in eyes rinse cautiously with water for several minutes
P302 + P352	If on skin wash with plenty of water
P308 + P313	If exposed or concerned get medical advice / attention
P314	Get medical advice / attention if you feel unwell
P333 + P313	If skin rash or irritation occurs: get medical advice
P363	Wash contaminated clothing before reuse

※ Storage

P405	Store locked up
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※ Disposal

P501	Dispose of contents to hazardous waste collection point
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3. Composition/information on ingredients

Although several of the ingredients used to formulate this product may be hazardous in the raw state, the manufacturing process results in a solid, infusible form, binding and otherwise, rendering the mixture inert.

Chemical name	CAS-No.	EINECS-No.	R/S-sentences	% weight
Phenolic Resin	9003-35-4	N/A	None	>1
Aramid Pulp	26125-61-1	N/A	None	>1
Nitrile Butadiene Rubber	N/A	N/A	None	>1
Tin Sulfide	1315-01-1	N/A	None	>1
Barytes	7727-43-7	231-784-4	None	>1
Potassium Titanate	12030-97-6	N/A	None	>1
Zirconium Dioxide	1314-23-4	N/A	None	>1
Graphite	7782-42-5	231-955-3	None	>1
Antimony Trisulfide	1345-04-6	215-713-4	None	>1
Coke	65996-77-2	N/A	None	>1
Carbon Fiber	N/A	N/A	None	>1

4. First aid measures

Inhalation:	Move to fresh air. Seek medical attention.
Ingestion:	Seek medical attention.
Eye Contact:	Flush with water to remove particulate. Seek medical attention.
Skin Contact:	Wash thoroughly with soap and water. If persistent irritation develops, seek medical attention.

5. Fire-fighting measures

Flashpoint:	N/A.
LEL:	N/A.
UEL:	N/A.
Autoignition Temperature:	This product is inherently flame resistant, but may ignite at temperatures exceeding 1,112 F (600 °C) in an oxygen-enriched atmosphere.
Extinguishing Media:	Product itself is non-combustible. Use media suitable for surrounding fire. (Water, sand and dry ice are ok.)
Unsafe extinguishing media:	None.
Special exposure hazards and Precautions for Fire Fighters:	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.
Hazchem Code:	N/A.

6. Accidental release measures

Personal precautions:	Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation.
Environmental precautions:	No special environmental precautions required.
Methods for clean-up:	If a release of dust occurs during machining, abrading, or riveting, remove dust by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust in the workplace.

7. Handling and storage

Precautions for Safe Handling	Avoid dust formation No special handling advice required.
Conditions for Safe Storage	Dry storage.

8. Exposure controls/personal protection

Eyes:	Wear safety glasses or goggles, as necessary, if dust exposure is possible.
Skin Protection:	If skin irritation occurs, gloves and other protective garments may be worn.
Ventilation Protection:	Any operation which may produce dust, including machining, grinding, riveting, or abrading this product, should be adequately exhausted to prevent inhalation of dust.
Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment. When dust concentration is above the exposure limits, workers have to use appropriate certified respirators.

9. Physical and chemical properties

Physical state:	Solid
Odor:	Phenolic
Boiling Point:	N/A
Melting Point:	N/A
pH:	8.40
Density:	2.40 g/cm ³ (20°C)
Water Solubility:	Insoluble
Vapor Pressure:	N/A
Vapor Density (air = 1):	N/A
% Volatile:	N/A
Evaporation Rate:	N/A
Decomposition temperature	N/A
Viscosity	N/A

10. Stability and reactivity

Stability:	Stable at normal temperatures and storage conditions.
Chemical Stability:	The material is thermally stable when used and stored as directed.
Incompatibility (Materials/Conditions to Avoid)	None.
Hazardous Polymerization:	Will not polymerize. This product is fully cured in the manufacturing process.
Decomposition Products:	Oxides of carbon, nitrogen and sulfur; hydrocarbons; ammonia; and other trace organic compounds.

11. Toxicological information

Acute Toxicity:	LD ₅₀ Data is not available for this product as a mixture.
Skin corrosion / Irritation:	May cause irritation. Prolonged skin contact may cause skin sensitization and/or dermatitis.
Serious Eye Damage / Irritation:	Dust may cause irritation and redness. Particles may scratch the eye.
Respiratory sensitization:	Dust may cause irritation.
Reproductive toxicity:	No information available.
STOT-single exposure:	No information available.
STOT-repeated exposure:	No information available.
Germ cell mutagenicity:	No information available.
Aspiration Hazard:	No information available.

12. Ecological information

Ecotoxicity:	Ecotoxicity Data is not available for this product as a mixture. However, for some of the components in their Raw Material state;
Persistence and biodegradability:	No information available.
Bio accumulative Potential:	No information available.
Mobility in Soil:	No information available.
Other Adverse Effects:	No information available.

13. Disposal considerations

Disposal Method:	Product should be disposed in accordance with applicable State, conforming to the local law regulates disposal of solid waste. Waste should be placed in airtight containers.
Disposal limitations:	Product should not be discharged to sewer. Product should not be discharged to storm water. Product is not suitable for recycling. Product is not suitable for incineration.

14. Transport information

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the Chinese Code of Dangerous Goods Code for transport by Road and Rail.

UN Number:	N/A
Proper Shipping Name:	Not regulated
Transport Hazard Class:	N/A
Identification Number:	N/A
Packing Group:	N/A
Shipping Label:	None
Additional Marking Requirement:	None

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. Regulatory information

The product is subject to the following international agreements.

RCRA Hazardous Waste Code:	California Prop. 65
CERCLA Hazardous Substances:	California Prop. 65
OSHA:	California Prop. 65
WHMIS Classification:	California Prop. 65

16. Other information

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

This product does not contain any deliberate addition of asbestos.

Abbreviations Used in preparation of the SDS

GHS:	Global Harmonized System of Classification and Labeling
CAS #:	Chemical Abstract Service Number
N/A:	Not Applicable
LEL:	Lower explosive limit
UEL:	Upper explosive limit
LD ₅₀ :	Lethal Dose 50%
IMDG:	International Maritime Dangerous Goods Code
IATA:	International Air Transport Association