"ZHONGLI®" & "KELIREN®"

Hangzhou Keli Chemical Co., Ltd

The MSDS format adheres to the standards and regulatory requirements of The People□s Republic of China and may not meet regulatory requirements in other countries.

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

• Material Identification

"ZHONGLI® "&"KELIREN® " Chlorinated polyethylene is a registered trademark of Hangzhou Keli Chemical Co., Ltd

• Tradenames: "ZHONGLI® "&"KELIREN® "CPE135A, CPE135B.
"ZHONGLI® "&"KELIREN® "CM352L,CM352,CM352J,CM3680,CM3590,CM352M.
"ZHONGLI® "&"KELIREN® "CPE135C,CPE235C,CPE132C.
"ZHONGLI® "&"KELIREN® "CM301,CM422,CM252,CM282,CM302
CHLORINATED POLYETHYLENE,CPE RESIN & RUBBER

• Company Identification

MANNUFACTURE

Hangzhou Keli Chemical Co., Ltd
No.39 , Jinyi Road , Xiaoshan Economic & Technology Development Zone,
Hangzhou City , Zhejiang Province , China. 311215

PHONE/FAX NUMBERS

Production Information: 86-571-82836915
Technical Emergency : 86-571-82877903, 82877906.
Transport Emergency : 86-571-82831508, 82836916.
Fax Number : 86-571-82832258, 82831311.

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
CHLORINATED POLYETHYLENE	64754-90-1	≥90
TALC , CONTAINING NO ASBESTOS FIBERS	14807-96-6	0-5
CALCIUM STEARATE	1592-23-0	0-5
CALCIUM CARBONATE	471-34-1	0-5

HAZARDS IDENTIFICATION

Potential Health Effects

ADDITIONAL HEALTH EFFECTS

CHLORINATED POLYETHYLENE

ACUTE OR IMMEDIATE EFFECTS :ROUTES OF ENTRY AND SYMPTOMS

INGESTION Not a probable route of exposure. Single dose oral LD-50 has not been determined. Single dose oral toxicity is believed to be very low.

SKIN Skin contact , especially with hot polymer , may cause skin irritation in some sensitive people resulting in redness , itching ,and in extreme cases , blistering. Avoid contact with hot polymer which may give thermal burns.

EYE Polymer chips or dust in the eye may cause mechanical damage including scratching of the corners.

INHALATION Vapors released during processing may be composed of hydrogen chloride and possibly carbon monoxide . These gases are evolved , they will cause tearing and burning of the eyes . The vapors will also cause irritation to the upper respiratory tract which results in a sore throat and coughing in severe cases with shortness of breath.

TALC
Short-term over-exposure by inhalation to Talc cause irritation of the nose , throat and lungs with cough , difficulty breathing or shortness of breath . Long-term over-exposure may lead to chronic lung disease with impaired lung function and abnormal X-rays.

Increased susceptibility to the effects of Talc may be observed in persons with pre-existing disease of the lungs.

Carcinogenicity Information None of the components present in this material at concentrations equal to or greater than 0.1% are listed by TARC , OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION
If inhaled , remove to fresh air . If not breathing , give artificial respiration . If breathing in difficult , give oxygen . Call a physician.

SKIN CONTACT
Flush skin with water after contact . Wash contaminated clothing before reuse.
If molten material gets on skin , cool rapidly with cold water . Do not attempt to remove material from skin . Obtain medical treatment for thermal burn.

EYE CONTACT
In case of contact , immediately flush eyes with plenty of water for at least 15 minutes . Call a physician.

INGESTION
Not a probable route . However , in case of accidental ingestion , call a physician.

FIRE FIGHTING MEASURES

Flammable Properties
Like most organic powders or crystals , under severe dusting conditions , this material may from explosive mixtures in air.

UNUSUAL FIRE , EXPLOSION HAZARDS
Solid polymer can be combusted only with difficulty . Hydrogen chloride is a decomposition/combustion product.

HAZARDOUS COMBUSTION PRODUCTS : Hydrogen chloride , carbon monoxide , organic aids , aldehydes , alcohols.

Extinguishing Media
Water Fog , Foam , Dry Chemical , CO2.

Fire Fighting Instruction
Use self-contained breathing apparatus and protective clothing to avoid exposure to hydrogen chloride and other fumes.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)
NOTE : Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up . Use appropriate PERSONNEL PROTECTIVE EQUIPMENT during clean-up.

HANDLING AND STORAGE

Handling (Personnel)
See FIRST AID and PERSONNEL PROTECTIVE EQUIPMENT SECTIONS

Storage
Store in a cool , dry place.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
Use sufficient ventilation to keep employee exposure below recommended limits . Use static controls . Static charges can build up and ignite dust or solvent laden atmospheres.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses . Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying of molten material . A full face mask respirator provides protection from eye irritation.

RESPIRATORS

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge with a dust/mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits . Protection provided by air purifying respirators is limited . Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release , exposure levels are not known , or any other circumstances where air purifying respirators may provide adequate protection .

PROTECTIVE CLOTHING

If there is potential contact with hot/molten material , wear heat resistant clothing and footwear.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Solubility in Water:	**negligible**
Odor:	**No odor**
Form:	**Powder**
Color:	**Off-white**
Specific Gravity:	**1.15g/cm^3**

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to Avoid

Avoid open flames and high temperature

Incompatibility with Other Materials

No reasonably foreseeable.

Decomposition

Hazardous gases or vapors can be released , including carbon monoxide , hydrogen chloride (HCl) , hydrocarbon oxidation products including organic acids , aldehydes and alcohols.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

TALC

Talc

Oral LD50: 920mg/kg in rats

Inhalation 5 hour ALC: >22mg/L in rats

Long-term exposure by ingestion to Talc caused no significant decrease in life span.

Long-term exposure by ingestion to Talc caused no significant decrease in life span.

A single exposure by inhalation to high doses of Talc caused irregular respiration and lacrimation but no evidence of an inflammatory reaction . repeated exposure caused no adverse effects on survival or histological changes . Long-term exposure in rats caused chronic inflammation , impaired pulmonary function and histopathological changes of the lungs.

One lifetime inhalation study reports an incidence of lung and adrenal tumors in rats exposed to Talc . the lung tumors and chronic inflammation occurred at dust levels which overwhelmed the animals lung clearance mechanism and , therefore , are of questionable biological relevance for man . The adrenal tumors are unlikely to be a direct effect of Talc exposure and are of questionable relevance . No increases in tumors were observed in mice . Talc has not caused developmental toxicity in animals . No animal data are available to define the reproductive toxicity of Talc . Tests have shown that Talc does not cause genetic damage in bacterial or mammalian cell cultures , or in animals . Animal data indicate that Talc does not cause permanent genetic damage in reproductive cells of mammals (does not cause heritable genetic damage).

ECOLOGICAL INFORMATION

Ecotoxicological Information
AQUATIC TOXICITY:
No information is available . Toxicity is expected to be low based on insolubility in water.

DISPOSAL CONSIDERATIONS

Waste Disposal
Preferred options for disposal are (1) recycling , (2) incineration with energy recovery , and (3) landfill . the high fuel value of this product makes option 2 very desirable for material that cannot be recycled , but incinerator must be capable of scrubbing out acidic combustion products . treatment , storage , transportation , and disposal must be in accordance with applicable federal , state/provincial , and local regulations.

TRANSPORTATION INFORMATION

Sipping Information
DOT
Proper Shipping Name : Not regulated

OTHER INFORMATION

Additional Information
MEDICAL USE : Do not use in medical applications involving permanent implantation in the human body . For other medical applications see Hangzhou Keli Chemical Co., Ltd Medical Application Policy.
The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS :
Hangzhou Keli Chemical Co., Ltd
Address: No.39 , Jinyi road , Xiaoshan Economic & Technology Development Zone , Hangzhou City , China.
Telephone: 0086-571-82832268

This information is based upon technical information believed to be reliable . It is subject to revision as additional knowledge and experience is gained.

End of MSDS