Safety Data Sheet

Version: 1.5
Product name: Kite CHLORINATED POLYETHYLENE (CPE) Revision Date: 9/9/2017

Section 1: Product and company identification

1.1 Product name: Kite Chlorinated Polyethylene

Substance name: Chlorinated Polyethylene

Trade Name:

CPE 135A grade one	CPE 235C	CPE 2500B	CM 1354
CPE 135A grade two	CPE 6025	CPE 2500T	CM 1360
CPE 135A	CPE 6025LM	CPEK 135	CM 2354
CPE 135A White	CPE 6035	CM 135A	CM 3354
CPE 135C	CPE 6650	CM 135B	CM 5513
CPE 142C	CPE 7035	CM 135B-L	CM 6605
CPE 230A	CPE 8030	CM 140	CM 8360
CPE 230B	CPE 2500A	CM 140B	CM 2500B

1.2 Recommended use of the chemical and restrictions on use:

Recommended use: Used in the plastics industry as an additive to modify a range of properties. Also used in rubber industry.

Restrictions on use: Commercial use only.

1.3 Manufacturer/Supplier/Distributor Information:

Manufacturer: WEIFANG TIANRUI CHEMICAL CO., LTD.
NO.799 YIIXN STREET, HANTING ECONOMIC AND TECHNICAL DEVELOPING DISTRICT, SHANDONG, P.R. CHINA

E-mail gloriagao@tianruichem.com

Telephone: +86-536-7367777

Fax: +86-536-7367869

Distributor: R. E. Carroll, Inc.
SDS Responsible Party: John Boruta
Phone: 609-695-6211
Fax: 609-695-0102
Email: johnb@recarroll.com
1570 North Olden Avenue
Trenton, NJ 08638
www.recarroll.com

1.4 Emergency telephone number:

In China:	+86-536-7367777 (only office hours available)
In the US:	For a transport accident or leak, fire or major spill, call CHEMTREC, (800) 424-9300. For International CHEMTREC assistance, call 1-703-527-3887 (collect calls accepted). Read the entire SDS for a complete hazard assessment.

Section 2: Hazards identification

2.1 Hazard Classification:

OSHA Classification in accordance with 29 CFR 1910 (OSHA HCS): hazardous.
This SDS meets the requirements of GHS Revision 3.

2.2 Label elements including precautionary:

Symbol:	No pictogram needed.
Signal word:	Warning!
OHSA Hazard Statement:	May form combustible dust concentrations in air.
OSHA Precautionary Statements:	Keep away from all ignition sources. Prevent dust accumulations to minimize explosion hazard. Use explosion-proof (electrical/ventilation/lighting) equipment. Use non-sparking tools. Take action to prevent static discharge. Wear protective gloves. Keep container tightly closed. Ground/bond container and receiving equipment. Observe good industrial hygiene practices. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If Inhaled: Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.
Storage	Store away from incompatible materials. Store locked up.
Disposal	Dispose of contents/container in accordance with all regulations.

2.3 Hazard(s) Not Otherwise Classified (HNOC): The product, in the form supplied, is not anticipated to produce significant adverse human health effects. Contains high molecular weight polymer(s). This product has no known chronic effects. Under normal processing conditions, this material will release fume or vapor. Components of these releases may vary with processing time and temperatures. Thermal degradation of the resin may generate hydrogen chloride gas at concentrations which may cause eye, skin, or respiratory irritation and, with repeated or prolonged exposures, nausea, drowsiness, headache and weakness.

Section 3: Composition/information on ingredients:

Chemical name	CAS No.	Content (%)
Chlorinated polyethylene	64754-90-1	Min.99.9%
Calcium Carbonate (added to finished product as anti-dusting agent)	471-34-1	Approx. 0.1%

Section 4: First aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

4.1 Inhalation:

Move to fresh air. If a cough or other respiratory symptoms develop, seek medical attention.

4.2 Skin contact:

Wash skin with plenty of soap and water. If redness, itching or burning sensation develops, seek medical attention. Wash contaminated clothing and footwear before use.

4.3 Eye contact:

Immediately flush eyes thoroughly with water for several minutes. Remove contact lenses after one to two minutes and continue flushing for several more minutes. If redness, itching or burning sensation develops, seek medical attention.

4.4 Ingestion:

DO NOT INDUCE VOMITING. Drink one or two glasses of water. Ingestion may cause gastrointestinal blockage. Do not give laxatives. If irritation or discomfort develops, seek medical attention or contact a poison control center. Never give anything by mouth to an unconscious person.

4.5 Acute and delayed symptoms/effects:

Eye Contact:	Solid or dust may cause irritation or corneal injury due to mechanical action. Thermal degradation of the resin may generate hydrogen chloride gas at concentrations which may cause eye irritation.
Skin Contact:	Mechanical injury only: Prolonged contact is essentially nonirritating to skin. No adverse effects anticipated by skin absorption.Thermal injury: Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.
Ingestion:	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts, but may cause choking if swallowed.
Inhalation:	Dust may cause irritation to upper respiratory tract (nose and throat). Thermal degradation of the resin may generate hydrogen chloride gas at concentrations which may cause respiratory irritation.
Chronic health effects:	Chronic exposure may cause respiratory irritation. See Section 11.
Relevant routes of exposure:	Eye, skin contact, inhalation.

4.6 Indication of immediate medical attention and notes for physicians:

Persons with pre-existing skin, eye, or respiratory conditions may be at an increased risk from the irritant or allergenic properties of this material. Attending physician should treat exposed patients symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:
Use foam, carbon dioxide (CO_2) or dry chemical to extinguish fire. Limit use of water spray to cool fire-exposed containers and to protect personnel. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents. Spattering of molten product may result from spraying water.

Unsuitable extinguishing media:
For this product, no limitations of extinguishing agents are given.

5.2 Special hazards arising from the chemical:

Unusual fire and explosion hazards:

Do not permit dust to accumulate. When suspended in air, dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustions may occur. Dense smoke is emitted when burned without sufficient oxygen.

Hazardous Combustion Products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide, Carbon dioxide, Hydrogen chloride.

5.3 Special protective equipment and precautions for firefighters:

Fire Fighting Procedures:

Keep personnel away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

Special Protective Equipment for Firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Spilled material may cause a slipping hazard. Use appropriate safety equipment. See section 8 for information on personal protection equipment.

6.2 Environmental precautions and protective procedures:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains, sewers, waterways, and/or groundwater.

6.3 Methods and material for containment and cleaning up:

Contain spilled material if possible. Sweep up using non-sparking tools. Collect in suitable and properly labeled containers. See section 13, Disposal Considerations, for additional information.

Section 7: Handling and storage

7.1 Precautions for safe handling:

No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. Use with adequate ventilation. When appropriate, workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

7.2 Conditions for safe storage (including any incompatibilities):

Store in cool place.
Keep container tightly closed in a dry and well-ventilated place.
Store in accordance with good manufacturing practices.

Section 8: Exposure controls and personal protection

8.1 Control parameter:

Occupational Exposure Limit values:

Chlorinated polyethylene CAS#64754-90-1	There are currently no occupational exposure limit values established for this product. Decomposition may produce hydrochloric acid.

Calcium Carbonate CAS# 471-34-1	
Australia:	2 mg/m^3 respirable aerosol
Belgium:	2 mg/m^3
Canada:	3 mg/m^3
Denmark:	0.2 mg/m^3 respirable aerosol
Spain:	2 mg/m^3 respirable aerosol
Sweden:	2 mg/m^3 inhalable aerosol; 1 mg/m^3 respirable aerosol
Switzerland:	2 mg/m^3 respirable aerosol
The Netherlands:	0.25 mg/m^3 respirable aerosol
USA-NIOSH:	2 mg/m^3
United Kingdom:	1 mg/m^3 respirable aerosol
ACGIH-TWA:	10 mg/m^3
USA-TLV:	10 mg/m^3
Germany-MAK:	6 mg/m^3

Hydrogen chloride CAS# 7647-01-0	MAC: 1 mg/m^3 ACGIH: 2 ppm (Ceiling) OSHA Table Z-1: 7 mg/m^3, 5 ppm (Ceiling) Hydrogen chloride (hydrochloric acid) may be generated under thermal degradation conditions.

8.2 Appropriate engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

8.3 Personal protective equipment:

Eye protection:
Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

Body protection:
Wear clean body-covering clothing to prevent skin exposure.

Hand protection:
Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Selection of gloves will depend on the task. Use gloves with insulation for thermal protection, when needed.
Respiratory protection:
Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort, have been experienced, or where indicated by your risk assessment process. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present. The following should be effective types of air-purifying respirators: When dust/mist is present use a Particulate filter. When combinations of vapors, acids or dusts/mists are present, use an Organic vapor with acid gas cartridge and particulate pre-filter.

Other:
Have eyewash station in work area. Do not consume or store food in the work area. Wash hands before smoking or eating.

Section 9: Physical and chemical properties

Appearance:	Off-white powder
Odor:	Odorless
Odor threshold:	No data available
pH:	Not applicable
Melting point:	No test data available
Boiling point:	No data available
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	Not applicable

Solubility:	Insoluble in cold water
Vapor density:	Not applicable
Relative density:	Not determined
Bulk density	0.45 g/cm^3
Partition coefficient, n-octanol/water:	Not applicable
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Not applicable

Section 10: Stability and reactivity

10.1 Chemical stability:

Stable under normal temperature conditions and recommended use.

10.2 Possibility of hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

10.3 Conditions to avoid:

Strong heating, open flames. Exposure to elevated temperatures can cause product to decompose.

10.4 Incompatible materials:

No information available.

10.5 Hazardous decomposition products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperature, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to Aldehydes, Alcohols, Organic acids, Hydrogen chloride. Decomposition products can include trace amounts of Hydrocarbons.

Section 11: Toxicological information

11.1 Information on the likely routes of exposure:

Inhalation:	Inhalation is unlikely under normal conditions.
Mouth:	Ingestion is unlikely under normal conditions. Harmful if swallowed.
Skin and eye contact:	No data available.

11.2 Information on toxicological effects:

Acute toxicity:

	Oral	LD_{50} > 5000 mg/kg
64754-90-1	Inhalation	No data available.
	Dermal	No data available.

	Oral	LD_{50} > 10000 mg/kg
471-34-1	Inhalation	No data available.
	Dermal	> 2000 mg/kg bw(rat)

Skin corrosion/irritation: No information available.

Serious eye damage/irritation: No information available.

Respiratory or skin sensitization: No information available.

Germ Cell Mutagenicity: No information available.

Reproductive Toxicity: No information available.

STOT-Single Exposure: No information available.

Regulated carcinogen(s): This product contains no components present at concentrations equal to or greater than 0.1% listed by IARC, OSHA, NTP, or ACGIH as a carcinogen.

11.3 Numerical measures of toxicity:

No information available.

Section 12: Ecological information

12.1 Aquatic and terrestrial ecotoxicity:

The product is not expected to be acutely toxic to aquatic organisms. Quantitative data on the acute fish/daphnia/bacteria toxicity of this product are not available.

12.2 Persistence and degradability:

This water-insoluble polymeric solid is expected to be inert in the environment. Surface photo-degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

12.3 Bioaccumulative potential:

No bio-concentration is expected because of the relatively high molecular weight (MW greater than 1000). In the terrestrial environment, material is expected to remain in the soil where it may be subject to wind dispersion. In the aquatic environment, material will sink and remain in the sediment.

12.4 Mobility in soil:

Based on best current information, there is no data known associated with this product.

12.5 Other adverse effects:

No other relevant information available.

Section 13: Disposal considerations

13.1 Disposal methods:

Uncontaminated discarded product is not a hazardous waste under RCRA. All disposal methods must comply with applicable laws. Do not dump into any sewers, on the ground or into any body of water. All disposal practices must comply with all federal, state, and local laws and regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. If incineration is used, take precautions to guard against the formation of explosive dust air mixtures when handling combustible powders.

13.2 Disposal precaution:

Observe all federal, state, and local regulations when disposing of this product.

13.3 Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue. Puncture or otherwise destroy empty container and dispose of in a facility permitted for nonhazardous waste.

Section 14: Transport information

14.1 UN number:	Not regulated.
14.2 UN proper shipping name:	Not regulated.
14.3 Transport hazard class:	Not regulated.
14.4 Packing group (if applicable):	Not regulated.
14.5 Marine Pollutant (Yes/No):	No
14.6 Special precaution:	No information available.

Section 15: Regulatory information

US Regulations

15.1 SARA Section 311/312 Hazard Categories

Acute Hazard:	No
Chronis Hazard:	No
Fire Hazard:	Yes
Reactive Hazard:	No
Sudden Pressure Release:	No

CERCLA Hazardous Substance:

Component(s)	Reportable Quantity
None	

15.2 SARA Section 302 Extremely Hazardous Substances:

Component(s)/ CAS Number	Concentration Min	Max
None		

15.3 SARA Section 313 Toxic Chemicals:

Component(s)/ CAS Number	Reporting Threshold	Concentration Min	Max
None			

15.4 California Proposition 65:

This product is not known to contain any chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

15.5 Pennsylvania Worker and Community Right To Know Act:

Hazardous Substances: Calcium carbonate.

15.6 New Jersey Worker and Community Right To Know Act:

Hazardous Substances: None listed.

International Regulations

Canadian Regulations:

15.8 WHMIS Statement: This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations*. This product is not classified as controlled in accordance with the Canadian Controlled Products Regulations (WHMIS).

This product complies with RoHS (Restriction on Hazardous Substances).

Other requirements in domestic and other countries:

CAS No.	EU	USA	Canada	Australia	Japan	China
	EINECS	TSCA	DSL	AICS	ENCS	IECSC
64754-90-1	Not listed	Listed	Listed	Listed	Listed	Listed
471-34-1	Listed	Listed	Listed	Listed	Listed	Listed

Korean Existing Chemicals Inventory All the ingredients of the product are listed in the inventory.

Section 16: Other information

16.1 Sources for data and references:

ESIS IUCLID Dataset: European chemical Substances Information System
HSDB: Hazardous Substances Data Bank.
ICSC: International Chemical Safety Cards.
GESTIS International Limit Values.
Provided by company.

16.2 Revision information:
Date of the previous revision: 05/09/2016 (Version 1.4)
Date of this revision: 09/09/2017 (Version 1.5)

Revision summary: Added newly approved grade.

16.3 Training advice:

Provide adequate information, instruction and training for operators.

16.4 Declare to reader:

The information in this SDS has provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.

END OF SDS