SAFETY DATA SHEET

Product Name	:	UHMWPE Resin
Applicant	:	Jiangxi Beluns Plastic Co.,LTD
Address	:	Nanshi Economic Development zone, WuNing County, Jiujiang City Jiangxi, China

Signed by Shanghai ICTS Group

Written by : **Star Gao**

Date: 24th October. 2018

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Section 1 – Chemical Product and Company Identification

Product name:	UHMWPE Resin
Common name:	Ultra-high molecular weight polyethylene resin
Type:	GUR 4150
Trade mark:	Ticona
Description:	Odorless, non-toxic white particles. Usage: UHMWPE has been widely used in textile, paper making, packaging, transportation, inwriting, chemical industry, mining, petroleum, construction, electrical, food, medical, sports and other fields, and began to enter conventional weapons, ships, automobiles and other fields. In the future, it will expand to aerospace and atomic energy fields.
Country of origin:	Made in China
Manufacturer:	PetroChina Company Limited
Address:	No. 9 North Street, Dongzhimen, Dongcheng District, Beijing, China.
Post Code:	100007
Tel:	（86-10）59986223
Fax:	（86-10）62099557
Information in case of emergency	
Contact:	Rex Zhang
Tel:	0086-792-2830099
Fax:	0086-792-2830066
Mobile phone:	0086-18807924688
Email:	beluns@beluns.com

Section 2 – Hazards Identification

Classification of the chemical

Product definition: Mixture

GHS Classification

This product is not a hazardous substance or mixture.

Classification of the chemical

Pictogram(s):	Not applicable.
Signal word:	Not applicable.
Hazard statements:	Not applicable.
Precautionary statements	Not applicable.
Supplemental label elements	Not applicable.

Description of any hazards not otherwise classified

No information available.

Ingredient with unknown acute toxicity

No information available.

Section 3 – Composition/Information on Ingredient

Chemical name	CAS No.	Content (%)
UHMWPE	9002-88-4	100%

Section 4 – First Aid Measures

Skin contact:	Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Eyes contact:	Wash out immediately with fresh running water. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Inhalation:	If fumes, aerosols or combustion products are inhaled remove from contaminated area. If irritation or discomfort persists seek medical attention.
Ingestion:	Drink plenty of warm water and urge vomiting, contact a Poisons Information Centre or a doctor.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media:	Use extinguishing media suitable for surrounding area. Do NOT direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.
Special hazards arising from the chemical:	Combustible solid which burns but propagates flame with difficulty. Combustion products include: Carbon monoxide (CO), Carbon dioxide (CO_2), formaldehyde, acrolein, etc.
Special protective	Wear breathing apparatus plus protective gloves. Prevent, by any

equipment for firefighters:	means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.

Section 6 – Accidental Release Measures

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

Personal precautions, protective equipment and emergency procedures:	Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator.
Environmental precautions:	Clean up all spills immediately. Prevent, by any means available, spillage from entering drains or water courses.
Methods and materials for containment and cleaning up:	Small leakage: Collect leaks as far as possible in closed containers. It is absorbed by sand, activated carbon or other inert materials and transferred to a safe place. No rush into the sewer. A large number of leaks: Build a dike or dig a hole for shelter. Close drainage pipes. Foam is used to cover evaporation. The explosion-proof pump is transferred to the tank car or special collector, and is recovered or transported to the waste disposal place for disposal.

Section 7 – Handling and Storage

Handling:	Provide good ventilation. Operators must undergo special training and strictly observe the operating procedures. It is recommended that operators wear self-priming respirators and chemical safety glasses. Keep away from fire, heat source, and strictly prohibit smoking. Avoid dust generation. Avoid contact with oxidants.
Storage:	Store in cool, ventilated storeroom. Keep away from fire and heat sources. It should be kept separately from oxidants and must not be mixed up. Equipped with corresponding varieties and quantity of firefighting equipment. Suitable materials should be provided in the storage area to accommodate leakage.

Section 8 – Exposure Controls, Personal Protection

Control parameters

Components with workplace control parameters：

Occupational Exposure Limits (OEL):

Source	Ingredient	TWA	STEL	Peak
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	polyethylene	5 mg/m^3	Not Available	Not Available

Emergency Limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Polyethylene	28 mg/m^3	310 mg/m^3	1,000 mg/m^3

Monitoring Method: Data not available.

Engineering Control: Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.

Personal protective equipment:

Respiratory Protection: Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eyes Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body Protection： Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hands Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Other Protections: No special environmental precautions required.

Section 9 – Physical and Chemical Properties

Appearance White particles.

Odor Odorless.

Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	130-136°C.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not applicable.
Upper explosive limit %(V/V):	Not applicable.
Lower explosive limit %(V/V):	Not applicable.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density（water=1）	0.94-0.95.
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	Not available.
VOC	Not available.

Section 10 – Stability and Reactivity

Stability:	Stable under normal temperature and pressure.
Distribution of Ban:	Strong oxidant.
Conditions to Avoid:	Keep away from overheat. Avoid contact with Incompatible materials.
Hazardous Decomposition Products:	Carbon monoxide (CO), Carbon dioxide (CO2), Formaldehyde, Acrolein, etc.
Hazardous Polymerization:	Will not occur.

Section 11 – Toxicological Information

Acute Toxicity:	Dermal (rabbit) LD50: >2000 mg/kg. Inhalation (mouse) LC50: 1.5 mg/l. Oral (rat) LD50: >3000 mg/kg.
Sub-acute and Chronic Toxicity:	Long term exposure to high dust concentrations may cause changes in lung function (i.e. pneumoconiosis).

Skin corrosion/irritation:	No known significant effects or critical hazards.
Serious eye damage/eye irritation:	No known significant effects or critical hazards.
Sensitization:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Reproductive Toxicity:	No known significant effects or critical hazards.
Potential Health Effects：	
Inhalation:	The material may produce irritation of the respiratory system.
Ingestion:	Ingestion is unlikely under normal conditions. May be harmful if ingested.
Skin contact:	Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.
Eye contact:	Direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Section 12 – Ecological Information

Ecotoxicity:	No data available.
Biodegradable:	No data available.
Non-biodegradable:	No data available.
Bioconcentration or biological accumulation:	No data available.
Other harmful effects:	No known significant effects or critical hazards.

Section 13 – Disposal Considerations

Waste information:	Firstly should consider the recovery or recycling as possible. Disposal must be made according to local and national regulations. It is suggested to be transferred to a safe place to be disposed of by incineration. No rush into the sewer.
Disposal notice:	Disposal area must comply with the environment and national safety standard.

Section 14 – Transport Information

UN Number： ADR, IMDG, IATA	Not regulated as dangerous goods.
UN proper shipping name: ADR, IMDG, IATA	Not regulated as dangerous goods.
Transport hazard class(es): ADR, IMDG, IATA	Not regulated as dangerous goods.
Packing group: ADR, IMDG, IATA	Not regulated as dangerous goods.
Environmental hazards:	No.
Special precautions for user：	No information available.

Section 15 – Regulatory Information

This Safety Data Sheet (SDS) was prepared according to Regulation(EC) No.1907/2006 (REACH), Annex Ⅱ,as amended by Regulation(EU) No. 2015/830 and UN GHS (the 6th revised edition).

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

No information available.

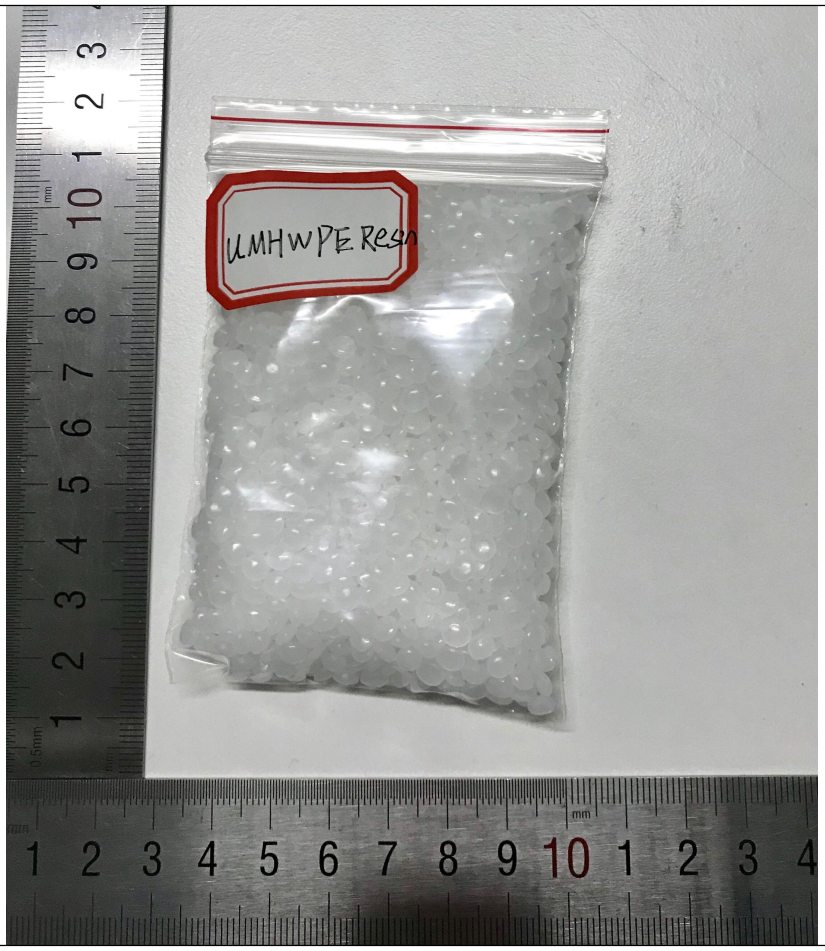
Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16 – Additional Information

MSDS Creation Date: 24th October. 2018

This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. Products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

Photo attachment
UHMWPE Resin


END OF REPORT

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