

# MATERIAL SAFETY DATA SHEET

<b>PRODUCT NAME</b>	<b>BETULIN</b>	<b>PRODUCT CODE</b>	<b>APP-CHEM-026</b>
<b>CAS NO.</b>	<b>473-98-3</b>	<b>CREATE DATE</b>	<b>2022.05.26</b>
<b>LISTER</b>	<b>XINRU PAN</b>	<b>VERIFIER</b>	<b>WANPING SONG</b>



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## 1 : IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

<b>ARTICLE NUMBER/TRADE NAME :</b>	<b>APP-CHEM026/ BETULIN (WHITE BIRCH BARK)</b>
<b>SUPPLIER DETAILS :</b>	<b>XI'AN APP-CHEM BIO(TECH) CO.,LTD</b>
	<b>6FLOOR BUILDING C, GAZELLE VALLEY PARK, NO.69 JINYERD. , HIGH</b>
	<b>TECH ZONE,</b>
	<b>XIAN CITY, 710077 , P.R. CHINA</b>
	<b>TEL : 0086 29 8831 8908</b>
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<b>VERSION DATE :</b>	<b>2022.05.26</b>

## 2 : COMPOSITION / INFORMATION ON INGREDIENTS

### CHEMICAL CHARACTERIZATION :

**SYNONYMS: LUP-20(29)-ENE-3B,28-DIOL**

**HAZARDOUS INGREDIENT(S) :**

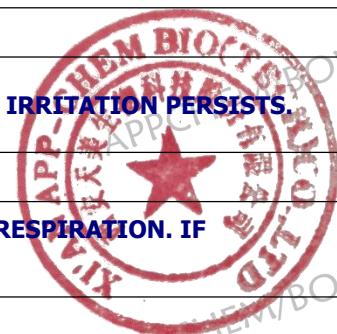
**NON-HAZARDOUS**

**CAS NO.: 473-98-3**

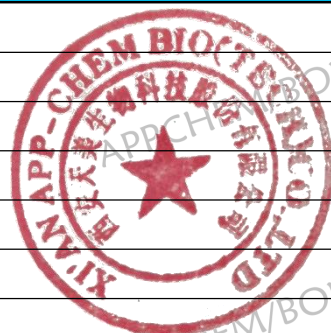
**EINECS : 207-475-5**



FEMA:N/A
<b>3 : HAZARD IDENTIFICATION</b>
<b>NONE HAZARDOUS. KEEP OUT OF THE REACH OF CHILDREN.</b>
<b>APPARANCE: ALMOST WHITE CRYSTALLINE POWDER</b>
<b>ODOR: CHARACTERISTIC</b>
<b>4 : FIRST-AID MEASURES</b>
<b>REMOVE CONTAMINATED SOAKED CLOTHING AND WASH BEFORE REUSE.</b>
<b>AFTER EYE CONTACT :</b>
<b>IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 10 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS AND SEEK MEDICAL ADVICE.</b>
<b>AFTER SKIN CONTACT :</b>
<b>WASH AFFECTED AREA WITH SOAP AND RUNNING WATER. SEEK MEDICAL ADVICE IF IRRITATION PERSISTS.</b>
<b>AFTER INHALATION :</b>
<b>IF INHALED, REMOVE PERSON TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.</b>
<b>AFTER INGESTION :</b>
<b>IF SWALLOWED, RINSE MOUTH WITH WATER (ONLY IF THE PERSON IS CONSCIOUS). OBTAIN MEDICAL ADVICE.</b>
<b>5 : FIRE-FIGHTING MEASURES</b>
<b>EXTINGUISHING MEDIA :</b>
<b>FOAM (PREFERRED), DRY CHEMICAL, WATER.</b>
<b>SPECIAL FIREFIGHTING PROCEDURES :</b>
<b>WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.</b>
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS :</b>
<b>HEATED, SEALED CONTAINERS WILL BUILD UP PRESSURE; COOL WITH WATER SPRAY IF POSSIBLE.</b>
<b>6 : ACCIDENTAL RELEASE MEASURES</b>
<b>WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES. KEEP PEOPLE AWAY, EVACUATE AREA.</b>
<b>TO AVOID POSSIBLE CONTAMINATION OF THE ENVIRONMENT, DO NOT DISCHARGE INTO ANY DRAINS, SURFACE WATERS OR GROUND WATERS.</b>



COVER WITH AN INERT, INORGANIC, NON-COMBUSTIBLE ABSORBENT MATERIAL (E.G. DRY-LIME, SAND, SODA ASH). PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS.
AVOID OPEN FLAMES OR SOURCES OF IGNITION (E.G. PILOT LIGHTS ON GAS HOT WATER HEATER). VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. DISPOSE OF IN ACCORDANCE WITH CURRENT LAWS AND REGULATIONS.
<b>7 : HANDLING AND STORAGE</b>
HANDLE THE PRODUCT USING GOOD MANUFACTURING PRACTICE. AVOID SKIN CONTACT AND INHALATION. PROVIDE SUITABLE AIR EXTRACTION VENTILATION IN THE WORK AREAS. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR. KEEP MATERIAL AWAY FROM SOURCES OF IGNITION (E.G. HOT SURFACES, SPARKS, FLAME AND STATIC DISCHARGES.
TO BE STORED IN TIGHTLY SEALED AND PREFERABLY FULL CONTAINERS IN COOL, DRY AND VENTILATED AREA. PROTECT FROM HEAT/OVERHEATING AND LIGHT SOURCES.
KEEP IN GLASS, SUITABLE PLASTIC, ALUMINUM OR LAQUER-LINED CONTAINERS.
<b>8 : EXPOSURE CONTROLS / PERSONAL PROTECTION</b>
<b>OCCUPATIONAL EXPOSURE LIMITS :</b>
OSHA TWA : NOT DETERMINED
ACGIH TWA : NOT DETERMINED
NIOSH TWA : NOT DETERMINED
OSHA PEL : NOT DETERMINED
ACGIH STEL : NOT DETERMINED
NIOSH STEL : NOT DETERMINED
<b>RESPIRATORY PROTECTION :</b>
DO NOT BREATH VAPORS. MECHANICAL EXHAUST REQUIRED. IN CONFINED OR POORLY VENTILATED AREAS, THE USE OF AN APPROPRIATE RESPIRATORY PROTECTION MAY BE REQUIRED.
<b>HAND PROTECTION :</b>
COMPATIBLE CHEMICAL-RESISTANT GLOVES ARE RECOMMENDED. WASH CONTAMINATED GLOVES BEFORE REUSE.
<b>EYE PROTECTION :</b>
CHEMICAL SAFETY GOGGLES ARE RECOMMENDED. WASH CONTAMINATED GOGGLES BEFORE REUSE.
<b>BODY PROTECTION :</b>
LIGHT PROTECTIVE CLOTHING RECOMMENDED. WASH CONTAMINATED CLOTHING BEFORE REUSE.
<b>HYGIENE MEASURES :</b>
AVOID INHALATION AND CONTACT WITH SKIN AND EYES. GOOD PERSONAL HYGIENE PRACTICES SHOULD BE USED. WASH AFTER ANY CONTACT, BEFORE BREAKS AND MEALS, AND AT THE END OF THE WORK PERIOD. SAFETY SHOWER AND EYE BATH RECOMMENDED.



### 9 : PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE / ODOR :

**ALMOST WHITE CRYSTALLINE POWDER /CHARACTERISTIC**

**MELTING POINT :** 256-257°C AT 760MM

**FLAMMABILITY :** NOT DETERMINED

**AUTOFLAMMABILITY :** NOT DETERMINED

**EXPLOSIVE PROPERTIES :** NOT DETERMINED

**OXIDIZING PROPERTIES :** NOT DETERMINED

**VAPOR PRESSURE :** NOT DETERMINED

**VAPOR DENSITY :** NOT DETERMINED

**EVAPORATION RATE :** NOT DETERMINED

**BULK DENSITY:** 0.50-0.70G/CM<sup>3</sup>

**PH OF PRODUCT :** NOT DETERMINED

**SOLUBILITY IN WATER :** INSOLUBLE



### 10 : STABILITY AND REACTIVITY

**STABILITY :** STABLE

**CONDITIONS TO AVOID :** HEAT, EXCESSIVE HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION.

**HAZARDOUS DECOMPOSITION PRODUCTS :** HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE. HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

### 11 : TOXICOLOGICAL INFORMATION

**ACUTE ORAL TOXICITY :** THIS PRODUCT MAY BE HARMFUL IF IT IS SWALLOWED.

**ACUTE DERMAL TOXICITY :** N/A

### 12 : ECOLOGICAL INFORMATION

#### BIODEGRADABILITY

**READILY BIODEGRADABLE :** NOT DETERMINED

**INHERENTLY BIODEGRADABLE :** NOT DETERMINED

#### ECOTOXICITY

**FISH :** NOT DETERMINED

**ALGAE :** NOT DETERMINED

**DAPHNIA :** NOT DETERMINED



<b>BACTERIA :</b>	<b>NOT DETERMINED</b>
<b>FURTHER INFORMATION :</b>	<b>PREVENT CONTAMINATION OF SOIL, GROUND AND SURFACE WATERS. DO NOT DISCHARGE PRODUCT UNMONITORED INTO THE ENVIRONMENT.</b>
<b>MIXTURE REPORTABLE TO :</b>	<b>NONE FOUND</b>
<b>13 : DISPOSAL CONSIDERATIONS</b>	
<b>DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.</b>	
<b>SOILED EMPTY CONTAINERS ARE TO BE TREATED IN THE SAME MANNER.</b>	
<b>AVOID DISPOSAL INTO DRAINAGE SYSTEMS.</b>	
<b>14 : TRANSPORT INFORMATION</b>	
<b>US DOT HAZARD CLASS :</b>	<b>N/A KEEP AWAY FROM CHILDREN</b>
<b>UN NUMBER :</b>	<b>NOT CLASSIFIED</b>
<b>UN PKG. GROUP :</b>	<b>NOT CLASSIFIED</b>
<b>UN ITEM :</b>	<b>NOT CLASSIFIED</b>
<b>ERG NUMBER :</b>	<b>NOT CLASSIFIED</b>
<b>15 : REGULATORY INFORMATION</b>	
<b>TOXIC SUBSTANCES CONTROL ACT: THIS PRODUCT IS LISTED ON THE U.S. EPA TSCA INVENTORY.</b>	
<b>HAZARD SYMBOL :</b>	<b>XN;XI</b>
<b>CLASSIFICATION</b>	<b>N/A</b>
<b>RISK PHRASES</b>	<b>R36/37/38; R20/21/22</b>
<b>SAFETY PHRASES</b>	<b>S36/37; S36; S26</b>
<b>16 : OTHER INFORMATION</b>	
<b>THE SAFETY DATA SHEET IS INTENDED TO PROVIDE INFORMATION ON SAFETY MATTERS AND IS NOT TO BE USED FOR QUALITY ASSURANCE PURPOSES.</b>	

