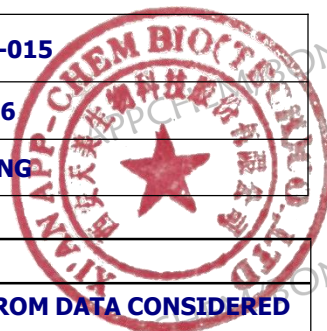


MATERIAL SAFETY DATA SHEET

PRODUCT NAME	NARINGENIN	PRODUCT CODE	APP-CHEM-015
CAS NO.	480-41-1	CREATE DATE	2022.05.26
LISTER	XINRU PAN	VERIFIER	CHAO WANG



DISCLAIMER

THE INFORMATION CONTAINED ON THE MATERIAL DATA SHEET HAS BEEN COMPILED FROM DATA CONSIDERED ACCURATE. ; THIS DATA IS BELIEVED TO BE RELIABLE, HOWEVER, IT MUST BE POINTED OUT THAT VALUES FOR CERTAIN PROPERTIES ARE KNOWN ; TO VARY FROM SOURCE TO SOURCE. XI'AN APP CHEM-BIO(TECH) CO.,LTD EXPRESSLY DISCLAIMS ANY WARRANTY EXPRESSED OR IMPLIED ; AS WELL AS ANY LIABILITY FOR ANY INJURY OR LOSS ARISING FROM THE USE OF THIS INFORMATION OR THE MATERIALS DESCRIBED. ; THIS DATA IS NOT TO BE CONSTRUED AS ABSOLUTELY COMPLETE SINCE ADDITIONAL DATA MAY BE DESIRABLE WHEN PARTICULAR ; CONDITIONS OR CIRCUMSTANCES EXIST. IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE BEST PRECAUTIONS ; NECESSARY FOR THE SAFE HANDLING AND USE OF THIS PRODUCT FOR YOUR APPLICATION. THIS DATA RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND NOT TO BE USED IN COMBINATION WITH ANY OTHER MATERIAL. MANY FEDERAL AND STATE ; REGULATIONS PERTAIN DIRECTLY OR INDIRECTLY TO THE PRODUCT'S END USE AND DISPOSAL OF CONTAINERS AND UNUSED MATERIAL. ; IT IS THE PURCHASER'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH ALL APPLICABLE REGULATIONS.

1 : IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

ARTICLE NUMBER/TRADE NAME :	APP-CHEM015/NARINGENIN (CITRUS GRANDIS.)
SUPPLIER DETAILS :	XI'AN APP-CHEM BIO(TECH) CO.,LTD
	6FLOOR BUILDING C, GAZELLE VALLEY PARK, NO.69 JINYERD. , HIGH TECH ZONE,
	XIAN CITY, 710077 , P.R. CHINA
	TEL : 0086 29 8834 6301
	FAX : 0086 29 8834 6302
VERSION DATE :	2022.05.26

2 : COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION :

SYNONYMS: 4',5,7-TRIHYDROXYFLAVANONE

HAZARDOUS INGREDIENT(S) :

NON-HAZARDOUS

CAS NO.: 480-41-1

EINECS : 266-769-1



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



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.

7 : HANDLING AND STORAGE

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.

8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS :

OSHA TWA : NOT DETERMINED

ACGIH TWA : NOT DETERMINED

NIOSH TWA : NOT DETERMINED

OSHA PEL : NOT DETERMINED

ACGIH STEL : NOT DETERMINED

NIOSH STEL : NOT DETERMINED

RESPIRATORY PROTECTION :

DO NOT BREATH VAPORS. MECHANICAL EXHAUST REQUIRED. IN CONFINED OR POORLY VENTILATED AREAS, THE USE OF AN APPROPRIATE RESPIRATORY PROTECTION MAY BE REQUIRED.

HAND PROTECTION :

COMPATIBLE CHEMICAL-RESISTANT GLOVES ARE RECOMMENDED. WASH CONTAMINATED GLOVES BEFORE REUSE.

EYE PROTECTION :

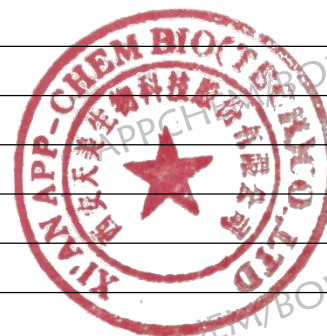
CHEMICAL SAFETY GOGGLES ARE RECOMMENDED. WASH CONTAMINATED GOGGLES BEFORE REUSE.

BODY PROTECTION :

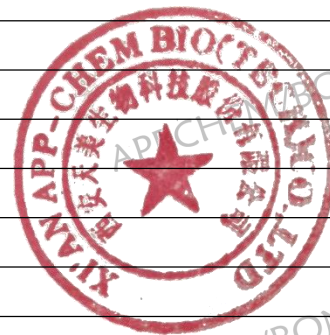
LIGHT PROTECTIVE CLOTHING RECOMMENDED. WASH CONTAMINATED CLOTHING BEFORE REUSE.

HYGIENE MEASURES :

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 :	
OFF-WHITE POWDER / CHARACTERISTIC	
MELTING POINT :	247-250°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 :	0.45-0.60G/CM³
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

BACTERIA :	NOT DETERMINED
FURTHER INFORMATION :	PREVENT CONTAMINATION OF SOIL, GROUND AND SURFACE WATERS. DO NOT DISCHARGE PRODUCT UNMONITORED INTO THE ENVIRONMENT.
MIXTURE REPORTABLE TO :	NONE FOUND
13 : DISPOSAL CONSIDERATIONS	
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.	
SOILED EMPTY CONTAINERS ARE TO BE TREATED IN THE SAME MANNER.	
AVOID DISPOSAL INTO DRAINAGE SYSTEMS.	
14 : TRANSPORT INFORMATION	
US DOT HAZARD CLASS :	N/A KEEP AWAY FROM CHILDREN
UN NUMBER :	NOT CLASSIFIED
UN PKG. GROUP :	NOT CLASSIFIED
UN ITEM :	NOT CLASSIFIED
ERG NUMBER :	NOT CLASSIFIED
15 : REGULATORY INFORMATION	
TOXIC SUBSTANCES CONTROL ACT: THIS PRODUCT IS LISTED ON THE U.S. EPA TSCA INVENTORY.	
HAZARD SYMBOL :	XI;XN
CLASSIFICATION	N/A
RISK PHRASES	R36/37/38
SAFETY PHRASES	S26; S36; S37/39
16 : OTHER INFORMATION	
THE SAFETY DATA SHEET IS INTENDED TO PROVIDE INFORMATION ON SAFETY MATTERS AND IS NOT TO BE USED FOR QUALITY ASSURANCE PURPOSES.	

