MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFACATION

COMPANY INFORMATION

NINGBO YONGSHUN FINE CHEMICAL CO., LTD **EMERGENCY CONTACT:** ADD:NO.879 NANPU ROAD,XIEPUTOWN,ZHENHAI DISTRICT, NINGBO CITY, ZHEJIANG,315204,CHINA

TEL: +86-574-86501227

PRODUCT NAME: N-PROPYL ACETATE

TRADE NAMES/SYNONYMS:

MTG MSDS 232; PROPYL ACETATE; PROPYL ESTER, N-PROPYL ESTER, 1-PROPYL ACETATE

CHEMICAL FAMILY: ESTERS, CARBOXYLIC, ALIPHATIC **UN PROPER SHIPPING NAME:**N-PROPYL ACETATE

PRODUCT USE: SOLVENT

2. HAZARD IDENTIFICATION

HEALTH: EYE CORROSION/IRRITATION: CATEGORY 2

TARGET ORGAN TOXICITY-SINGLE EXPOSURE: CATEGORY 3

ENVIRONMENTAL: NONE KNOWN

PHYSICAL: FLAMMABLE LIQUID: CATEGORY 2

LABEL/SYMBOLS:



SIGNAL WORDS: DANGER

HAZARD STATEMENTS

- H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR.
- H319 CAUSES SERIOUS EYE IRRITATION.
- H336 MAY CAUSE DROWSINESS OR DIZZINESS.

PRECAUTIONARY STATEMENTS PREVENTION

- P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. -NO SMOKING.
- P233 KEEP CONTAINER TIGHTLY CLOSED.
- P240 GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.
- P241 USE EXPLOSION-PROOF ELECTRIC/VENTILATION/LIGHTING/EQUIPMENT.
- P242 USE ONLY NON-SPARKING TOOLS.
- P243 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.
- P261 AVOID BREATHING DUST/FUME/GAS/MIST/VAPOUS/SPRAY.
- P264 WASH SKIN THOROUGHLY AFTER HANDLING.
- P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
- P273 AVOID RELEASE TO THE ENVIRONMENT.
- P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION.

PRECAUTIONARY STATEMENT RESPONSE

P303+P361+P353 IF ON SKIN(OR HAIR):REMOVE/TAKE OFF

IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER.

P304+P340 IF INHALED:REMOVE VICTIM TO FRESH AIR AND KEEP

AT A POSITION COMFORTABLE FOR BREATHING.

P305+P351+P338 IF IN EYES:RINSE CAUTIOUSLY WITH WATER FOR

SEVERAL MINUTES. REMOVE CONTACT LENS, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

P337+P313 IF EYE IRRITATION PERSISTS:GET MEDICAL ADVICE/ATTENTION.

P370+P378 IN CASE OF FIRE: USE ALCOHOL FOAM OR DRY CHEMICAL POWDER FOR EXTINCTION.

PRECAUTIONARY STATEMENT STORAGE

P403+P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED. P403+P235 STORE IN A WELL-VENTILATED PLACE. KEEP COLD. P405 STORE LOCKED UP.

PRECAUTIONARY STATEMENT DISPOSAL

P501 DISPOSE OF CONTENTS/CONTAINER IN ACCORDING WITH LOCAL REGULATION.

3 - COMPOSITION ON INGREDIENTS

COMPONENT %	CAS NUMBER	CHEMICAL NAME
99.5%MIN.	109-60-4	N-PROPYL ACETATE
4. FIRST AID		

EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHING, REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HAVE EYES EXAMINED AND TESTED BY MEDICAL PERSONNEL.

SKIN: REMOVE CONTAMINATED CLOTHING/SHOES. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED.

INGESTION: DO NOT GIVE LIQUIDS IF VICTIM IS UNCONSCIOUS OR DROWSY. OTHERWISE, GIVE 2 GLASSES OF WATER AND INDUCE VOMITING. KEEP VICTIM'S HEAD BELOW HIPS WHILE VOMITING. CALL DOCTOR.

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION OR IF BREATHING IS DIFFICULT, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK IMMEDIATE MEDICAL ATTENTION.

ADDITIONAL INFORMATION: NONE IDENTIFIED.

5. FIRE AND EXPLOSION DATA

FLASH POINT 20.00 C

FLAMMABLE LIMITS 0 TO 0

AUTOIGNITION TEMPERATURE NO DATA AVAILABLE

EXTINGUISHING MEDIA

USE: WATER SPRAY, ALCOHOL FOAM, DRY CHEMICAL, OR CO2

SPECIAL FIRE FIGHTING PROCEDURES

WARNING! FLAMMABLE LIQUID. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL. FIRE FIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS. VAPORS MAY TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. WATER SPRAY MAY BE INEFFECTIVE IN FIGHTING FIRE. WATER SPRAY MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE RUPTURE OF CONTAINERS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINERS CLOSED. USE WITH ADEQUATE VENTILATION.

6. ACCIDENTAL RELEASE MEASURES

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GENERAL PROCEDURES

WARNING. FLAMMABLE. VENTILATE AREA OF LEAK OR SPILL. REMOVE ALL SOURCES OF IGNITION. CLEAN-UP PERSONNEL REQUIRE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION FROM VAPORS. ONLY SPECIALLY TRAINED OR QUALIFIED PERSONNEL SHOULD HANDLE THE EMERGENCY.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

STORAGE

KEEP AWAY FROM HEAT, SPARKS, AND FLAME. KEEP AWAY FROM SOURCES OF IGNITION. STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE SUBSTANCES. FLAMMABLES-AREA.

HANDLING

WASH THOROUGHLY AFTER HANDLING. USE WITH ADEQUATE VENTILATION. GROUND AND BOND CONTAINERS WHEN TRANSFERRING MATERIAL. USE SPARK-PROOF TOOLS AND EXPLOSION PROOF EQUIPMENT. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE, (LIQUID AND/OR VAPOR), AND CAN BE DANGEROUS. KEEP CONTAINER TIGHTLY CLOSED. AVOID CONTACT WITH HEAT, SPARKS AND FLAME. AVOID INGESTION AND INHALATION. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE EMPTY CONTAINERS TO HEAT, SPARKS OR OPEN FLAMES.

COMMENTS

KEEP OUT OF REACH OF CHILDREN! EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION.

8. PERSONAL PROTECTION / EXPOSURE CONTROLS

- EYE AND FACE PROTECTION WARE APPROPRIATE PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES AS DESCRIBED BY OSHA'S EYE AND FACE PROTECTION REGULATIONS IN 29 CFR 1910.133 OR EUROPEAN STANDARD EN166.
- SKIN WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER). TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.
- RESPIRATORY IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEC. 2) USE A NIOSH APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 9 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLING RESPIR. OF AN AIR-PURIFYING RESPIR. FOR ORGANIC VAPORS.
- PROTECTIVE CLOTHING WHERE SPLASHING IS POSSIBLE, WEAR IMPERVIOUS CLOTHING AND BOOTS.
- WORK HYGIENIC PRACTICES USE GOOD PERSONAL HYGIENE WHEN HANDLING THIS PRODUCT. WASH HANDS AFTER USE, BEFORE EATING, DRINKING, SMOKING, OR USING THE TOILET.
- OTHER USE PRECAUTIONS FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN EYEWASH FACILITY AND A SAFETY SHOWER.

9. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM
COLOR
COLORLESS
ODOR
PH
ESSENTIALLY NEUTRAL

EMPIRICAL FORMULA C5H10O2

VAPOR PRESSURE (MM HG AT 20C) 23

VAPOR DENSITY (AIR = 1) HEAVIER THAN AIR

BOILING POINT 101.5 C FLASH POINT 20 C MELTING POINT -80 C

SOLUBILITY IN WATER 2.0% (20C) IN WATER. EVAPORATION RATE 2.75 (N-BUTYL ACETATE=1)

SPECITIC GRAVITY 0.887

10. STABILITY AND REACTIVITY

STABLE: YES

CONDITIONS TO AVOID: AVOID HEAT, SPARKS, FLAME AND CONTACT WITH STRONG

OXIDIZING AGENTS.

POLYMERIZATION: WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION: CARBON MONOXIDE, CARBON DIOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS, NITRIC ACID, SODIUM HYDROXIDE, ALKALI METAL HYDROXIDES.

11. TOXICOLOGICAL PROPERTIES

GENERAL COMMENTS NONE IDENTIFIED

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

AVOID UNCONTROLLED RELEASES OF THIS MATERIAL. WHERE SPILLS ARE POSSIBLE, A COMPREHENSIVE SPILL RESPONSE PLAN SHOULD BE DEVELOPED AND IMPLEMENTED.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD

THE PREFERRED OPTIONS FOR DISPOSAL ARE TO SEND TO LICENSED RECLAIMERS, OR TO PERMITTED INCINERATORS. ANY DISPOSAL PRACTICE MUST BE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. DO NOT DUMP INTO SEWERS, GROUND, OR ANY BODY OF WATER.

EMPTY CONTAINER

KEEP OUT OF REACH OF CHILDREN! EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. RCRA/EPA WASTE INFORMATION

CHEMICAL WASTE GENERATORS MUST DETERMINE WHETHER A DISCARDED CHEMICAL IS CLASSIFIED AS A HAZARDOUS WASTE. US EPA GUIDELINES FOR THE CLASSIFICATION DETERMINATION ARE LISTED IN 40 CFR. ADDITIONALLY, WASTE GENERATORS MUST CONSULT STATE AND LOCAL HAZARDOUS WASTE REGULATIONS TO ENSURE COMPLETE AND ACCURATE CLASSIFICATION.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME N-PROPYL ACETATE

PRIMARY HAZARD CLASS/DIVISION 3

UN/NA NUMBER UN 1276

PACKING GROUP II

LABEL FLAMMABLE LIQUID

NAERG 129

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: YES PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES CHRONIC: YES

311/312 HAZARD CATEGORIES: THIS PRODUCT SHOULD BE REPORTED AS AN

 ${\tt IMMEDIATE}({\tt ACUTE}) \, {\tt HEALTH} \, {\tt HAZARD}, \, {\tt DELAYED} \, ({\tt CHRONIC}) \, {\tt HEALTH} \, {\tt HAZARD}, \, {\tt AND} \, {\tt A} \, {\tt FIRE} \, {\tt HAZARD}.$

313 REPORTABLE INGREDIENTS: TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT IS NOT LISTED AS A TOXIC CHEMICAL.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT IS NOT LISTED AS AN EXTREMELY HAZARDOUS SUBSTANCE.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

16. OTHER INFORMATION

HMIS CODES

FLAMMABILITY: 3 HEALTH: 2 PHYSICAL HAZARD: 0 PERSONAL PROTECTION: H

MSDS CREATION DATE: 01/01/2017

REVISION DATE: 01/01/2019

PRODUCT CODE N-PROPYL ACETATE