

# MATERIAL SAFETY DATA SHEET

DATE: 2016/01/08

Product name: **CITRIC ACID MONOHYDRATE**

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING	
PRODUCT NAME:	CITRIC ACID MONOHYDRATE BP98
SUPPLIER:	TTCA CO.,LTD.
ADDRESS:	NO.27, XIN'AN NAN ROAD, ANQIU,SHANDONG,CHINA +86-536-2262229
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2. COMPOSITION/INFORMATION ON INGREDIENTS	
CHEMICAL NAME OF THE SUBSTANCE:	$C_6H_8O_7 \cdot H_2O$
CHEMICAL NAME:	2-HYDROXY-1,2,3-PROPANETRICARBOXYLIC ACID
SYNONYMS:	CITRIC ACID
CAS NO:	5949-29-1
3. HAZARDS IDENTIFICATION	
	INHALATION: INHALATION OF LARGE AMOUNTS OF DUST MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT.
	INGESTION: EXTREMELY LARGE ORAL DOSAGES MAY PRODUCE GASTROINTESTINAL DISTURBANCES.
MOST IMPORTANT HAZARDS	SKIN CONTACT: POSSIBLE IRRITATION ON PROLONGED CONTACT WITH MOIST OR SENSITIVE AREAS OF THE SKIN.
	EYE CONTACT: NO ADVERSE EFFECTS EXPECTED BUT DUST MAY CAUSE MECHANICAL IRRITATION. CHRONIC
	EXPOSURE: NO INFORMATION FOUND. AGGRAVATION OF PRE-EXISTING CONDITIONS: NO INFORMATION FOUND.
4. FIRST AID MEASURES	
GENERAL ADVICE MAJOR EFFECTS OF EXPOSURE	CONSULT A PHYSICIAN, IRRITATING TO EYES AND SKIN
INHALATION:	REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR ANY BREATHING DIFFICULTY.
SKIN CONTACT	WASH OFF IMMEDIATELY WITH SOAP AND PLENTY OF WATER, IF SKIN IRRITATION PERSISTS, CALL A PHYSICIAN.
EYE CONTACT	RINSE IMMEDIATELY WITH PLENTY OF WATER, ALSO UNDER THE EYELIDS, FOR AT LEAST 10 MINUTES. IF EYE IRRITATION PERSISTS, CALL A SPECIALIST.
INGESTION	DRINK PLENTY OF WATER OR MILK WHEN CLEAR-HEADED,DO NOT INGEST ANYTING WHEN NOT CLEAR-HEADED, CALL A PHYSICIAN IF NECESSARY.
MOST IMPORTANT SYMPTOM	_____
PROTECTION OF FIRST-AIDERS	NO SPECIAL INFORMATION FOUND.
CLUE TO PHYSICIAN	_____
5. FIRE FIGHTING MEASURES	
SUITABLE EXTINGUISHING MEDIA	WATER , DRY POWDER,CHEMICAL FOAM,CARBON DIOXIDE.

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SPECIAL HAZARD	FINE DUST DISPERSED IN AIR IN SUFFICIENT CONCENTRATIONS, AND IN THE PRESENCE OF AN IGNITION SOURCE IS A POTENTIAL DUST EXPLOSION HAZARD.
SPECIAL EXTINGUISHING PROCEDURE	NONE
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS	IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.
6. ACCIDENTAL RELEASE MEASURES	
PERSONAL PRECAUTIONS	USE PERSONAL PROTECTIVE EQUIPMENT.
ENVIRONMENTAL PRECAUTIONS REQUIRED	AVOID GENERATION OF DUST AND KEEP BREEZY
METHODS FOR CLEANING UP	FLUSH AWAY TRACES WITH WATER, SWEEP UP AND SHOVEL AFTER CLEANING, OR NEUTRALIZE WITH CALCAREOUSNESS.
7. HANDLING AND STORAGE	
HANDLING: TECHNICAL MEASURES / PRECAUTIONS SAFE HANDLING ADVICE	KEEP VENTILATED TO AVOID DUST, AVOID TO CONTACT WITH EYES AND SKIN, AVOID INHALATION AND INGESTION
STORAGE: TECHNICAL MEASURES / STORAGE CONDITIONS	KEEP TIGHTLY CLOSED IN A DRY, COOL AND VENTILATED PLACE STORE PROTECTED FROM INCOMPATIBLE SUBSTANCES
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
ENGINEERING MEASURES	SET EYEWASHER OR SHOWER. ENSURE ADEQUATE VENTILATION TO KEEP LOW CONSISTENCY IN AIR.
EXPOSURE LIMIT	NO SPECIAL PRECAUTIONS REQUIRED
PERSONAL PROTECTION EQUIPMENT:	
RESPIRATORY PROTECTION	EFFECTIVE DUST MASK
HAND PROTECTION	GLOVES
EYE PROTECTION	SAFETY GLASSES
SKIN AND BODY PROTECTION	LIGHTWEIGHT PROTECTIVE CLOTHING
PROTECTION HYGIENE MEASURES	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE
9. PHYSICAL AND CHEMICAL PROPERTIES	
STATE	SOLID
FORM	CRYSTAL
COLOUR	WHITE / COLOURLESS
ODOUR	ODOURLESS
PH SOLUTION (5%, 25° C)	2.2 (0.1N WATER SOLUTION)
MELTING POINT / RANGE	135-152 °C (TOTALLY MELT) 70-75 °C (BEGIN TO MELT)
DECOMPOSITION TEMPERATURE	>170 °C
BOILING POINT	
RELATIVE DENSITY	1.542
AUTOIGNITION TEMPERATURE	
SOLUBILITY (25° C)	EASILY SOLUBLE IN WATER.
10. STABILITY AND REACTIVITY	
STABILITY	STABLE AT NORMAL CONDITIONS
HAZARD IN SPECIAL CONDITION	NONE
CONDITIONS TO AVOID	HEAT, FLAME, IGNITION SOURCES, DUST AND INCOMPATIBLES.
SUBSTANCES TO AVOID	METAL NITROUS COMPOUNDS, COMPOSE WITH

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HAZARDOUS DECOMPOSITION  
PRODUCTSCOPPER,ZINC,ALUMINIUM.  
CARBON DIOXIDE AND CARBON MONOXIDE MAY  
FORM WHEN HEATED TO DECOMPOSITION.

## 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY \_\_\_\_\_  
SUBACUTE TOXICITY OR EXTENDED  
TOXICITY \_\_\_\_\_  
PARTIAL EFFECT \_\_\_\_\_  
CAUSE OF ALLERGY \_\_\_\_\_  
SPECIAL EFFECT \_\_\_\_\_

## 12. ECOLOGICAL INFORMATION

- A. ECOTOXICITY: ECOTOXICITY IN WATER (LC50): 440 TO 706 MG/L 96 HOURS [FISH. (GOLDFISH)].
- B. BOD5 AND COD: THE BOD5 IS 0.528 MG/KG [5 DAY(S)] BOD5. THE COD IS 0.728 MG/KG[ DAY(S)].
- C. PRODUCTS OF BIODEGRADATION: POSSIBLY HAZARDOUS SHORT TERM DEGRADATION PRODUCTS ARE NOT LIKELY. HOWEVER, LONG TERM DEGRADATION PRODUCTS MAY ARISE.
- D. TOXICITY OF THE PRODUCTS OF BIODEGRADATION: THE PRODUCT ITSELF AND ITS PRODUCTS OF DEGRADATION ARE NOT TOXIC.
- E. SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION: BIODEGRADATION: 98% AFTER 2 DAYS

## 13. DISPOSAL CONSIDERATIONS

WASTE FROM RESIDUES / UNUSED PRODUCTS RECYCLING IS PREFERRED TO DISPOSAL OR INCINERATION CAN BE LANDFILLED OR INCINERATED ACCORDING TO LOCAL RECYCLE OR WASTE DISPOSAL.

## 14. TRANSPORT INFORMATION

NOT DANGEROUS CARGO ACCORDING TO IMO REGULATIONS, ACCORING TO IATA DGR, IT CAN BE CLASSIFIED AS NOT RESTRICTED, AS PER SPECIAL PROVISION A3

## 15. REGULATORY INFORMATION

THE PRODUCT IS CLASSIFIED AND LABELLED IN ACCORDANCE WITH EU DIRECTIVES (88/379/EC) OR RESPECTIVE LAWS:

SYMBOL(S):



Xi:-IRRITANT

R-PHRASES:

S-PHRASES:

R-36 IRRITATING TO EYES  
S-26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

WATER HAZARD CLASS :

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## 16. OTHER INFORMATION

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