#### 1. Company identification

Company Name: Dalian Hefu Trading Co., Ltd.

Address: Room 1003 Yihua Building, No. 215 Huanghai Xisi Road, Dalian F.T.Z., Liaoning, China Telephone:0086 0411 39552835

Emergency telephone number : 0086 0411 39552835

Email address: <u>great@dlwawoo.com</u> Recommended use: Oxidizing agents polymerization initiators

#### 2. Ingredients/Identity Information

Proprietary: NO Ingredient: Citric Acid Anhydrous Chemical family: Organic acid Formula: C6H8O7 CAS Number:77-92-9 Synonym: Citric Acid Anhydrous, 1.2 3-propanetricarboxylic acid, Betathydroxytricarballylic Acid OSHA Pel: none Aegin: none TVL: none Other Recommended limit: none specified. Ingredient Sequence Number: 01

#### 3. Danger identification (Signs and symptoms of overexposure)

Inhale: Sore throat, cough, shortness of breath. SKIN & EYES: Irritation.

## 4. Emergency/First Aid Procedures

Inhale: move to fresh air, rest & call a doctor.

Ingest: Rinse mouth, give plenty of water to drink.

Skin: Remove contaminated clothes, rinse skin with plenty of water.

Eyes: First rinse thoroughly with plenty of water for at least 15 minutes, then transport to doctor, if necessary.

#### 5. Fire and Explosion Hazard Data

Flash point: N/A

Auto ignition temperature: N/A

Extinguishing Media: Use water fog, Carbon Dioxide. Foam or dry chemical.

Special fire righting Procedures: Fine Gghous should use NIOEM approved to full protective equipment when fighting chemical fire. Use water spray to cool nearby exposed to fire.

Unusual Fire And Expel Hazards: Fire or excessive heat may cause production of hazardous

decomposition products.

## 6. Storage

Manipulation precautions: Avoid development of dust, ensure a good ventilation for warehouse. Storage and containers: Keep exclusively in origin packaging Storage with other products: Don't store with oxide agents. Storage recommendations: Make sure product stored in DRY-COOL area. Protect from heat and direct sum exposures.

#### 7. Precautions for Safe Handling and Use

Steps to be taken if material released or split: clean up by vacuum or broom sweeping into

disposal drum.

Neutralizing Agent: Soda ash or Sodium Bicarbonate

Waste Disposal Method: Bury in approved landfill. Incinerate under approved controlled

procedures. Cover contaminated surfaces with Soda ash or Sodium

bicarbonate. Add water if necessary. Neutralize With NH40H or 6M HCL

as request. Wash down with water.

Other Precautions: Avoid contact with eyes and skin. Do not Breathe dust.

## 8. Special protection / Control Measures

Respiratory Protection: NIOSH approved dust mask.

Ventilation: Local exhaust as needed. Use mesh for good dust / process control.

Protective Gloves: Rubber

Eye Protection: Safety glasses with side shield.

Other Protective Equipment: Chemical washers goggles is gross contact likely.

Work Hygienic Practices: Wash hands after contact with this material. Do not ear, drink, or smoke around this product.

## 9. Physical / Chemical Characteristics

Appearance And Odor: Odorless, Free Flowing, White Crystalline powder. Relative molecular mass: 192.12 Boiling Point: N/A Melting Point: 307°F, 153 °C Specific Gravity: 1.665 Solubility In Water: 134G/100G WATER (appreciable) Corrosion Rate (IPY): N/A PH: 1.5~2.5ppm (in solution at 5%) Density: 1.665g/ml Vapor Pressure (MM Hg/70 F): N/A Decomposition Temperature: N/A Evaporation Rate And Ref: N/A

## 10. Physical Hazard / Reactivity Data

Stability: YES Conditions To Avoid (Stability): Hight temperature, sparks, and open flames. Materials To Avoid: Caustic (Alkalis). Solution are mildly corrosive to carbon steel. Hazardous Decomposition Products: NONE Hazardous Polymerization may occur: NO

#### 11. Health Hazard Data

Route Of Entry > Inhalation: YES Route Of Entry > Skin: YES Route Of Entry > Ingestion: YES Health Haz Acute And Chronic Acute-eyes: Slight irritation Skin Slight: Irritation Inhalation: Irritation Explanation carcinogenicity: NOT CONSIDERED TO BE A CARCINOGEN Carcinogenicity-NTP: NO (NTP for National Toxicology Program) Carcinogenicity-LARC: NO Carcinogenicity-OSHA: NO

## 12. Ecological Information

Biodegradability: Easily degradable Toxicity effects: Highly toxic for fish, not considered to be toxic for Bacteria. Air pollution: 50mg/m for a mass emission > 0.5kg/h Precaution: For waste removal please refer to the regional/national legislation.

## 13. Relative elimination remarks

Wmto coda: 07 01 99

Products recommendations: Can be eliminated with domestic garbage on condition it complies with local regulations.

Packaging recommendations: After usage, bags have to be completely empty. After appropriate washing, they can be used again. Non reusable packaging has to be eliminated the same way as the product itself.

## 14. Transport information:

No restrictive regulations oppose to the transport of Citric Acid.

## 15. Label Data

Label Required: YES Common Name: CITRIC ACID ANHYDROUS Chronic Hazard: NO Signal Word: CAUTION

Acute Health Hazard-Slight: X Contact Hazard-Slight: X Fire Hazard-None: X Reactivity Hazard-None: X Special Hazard Precautions: ACUTE-EYES SLIGHT IRRITATION SKIN SLIGHT IRRITATION INHALATION IRRITATION

Protect Eye: Y Protect Skin: Y Label Country: CHINA

#### 16. Important:

All information, recommendations and suggestions contained bare in regarding this product are based on data obtained from manufacturer and/or recognized technical sources. However **DALIAN HEFU TRADING CO., LTD**. makes no warranty, express or implied as its accuracy or completeness, as none is made as to use this product by others which is beyond our controls. It is the riser responsibility to determine the safety, toxicity and suitability for his own application and use handling and disposal of the product.

It is recommended to proceed to a product analysis after 3 years of production date. Thus to insure validity of parameters.

The information in this Material Safety Date Sheet (MSDS) relate only to the product designed bare in and does not relate to the use in combination, mixture process or otherwise with any other material.