Material Safety Data Sheet

Section 1 –Chemical Product and company identification

Product Identification: pentanoic acid, n-valeric acid

Company Identification: QUZHOU HENGSHUN CHEMICAL INDUSTRIAL CO.,LTD

No.1 Dongji Rd., Shenjia Development Zone,

Quzhou, Zhejiang, China

Tel: 0086 570 231 6866 Fax: 0086 570 231 6255

E-Mail: contact@hengshunchem.com

Section 2 - Composition/Information on Ingredients

Chemical name	assay	CAS NO.	EINECS#
Pentanoic acid	99-100	109-52-4	203-677-2

Section 3 - Hazards Identification, Including Emergency Overview

EMERGENCY OVERVIEW

Causes burns. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye:

Causes eye burns.

Skin:

Causes skin burns.

Ingestion:

Causes gastrointestinal tract burns.

Inhalation:

May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.

Chronic:

Not available.

Section 4 - First Aid Measures

First Aid:

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Combustible liquid.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling:

Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

Section 8 - Exposure Controls & Personal Protection

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low. Personal Protective Equipment

Eyes:

Wear safety glasses and chemical goggles if splashing is possible.

Skin:

Wear appropriate protective gloves to prevent skin

exposure.

Clothing:

Wear appropriate protective clothing to minimize

contact with skin.

Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape

provisions.

Section 9 - Physical & Chemical Properties

Physical State: Clear liquid

Color: colorless to yellow

Odor: Not available. pH: Not available.

Vapor Pressure: 0.3 hPa @ 20 deg C Viscosity: 2.2 mPas 20 deg C

Boiling Point: 185 deg C @ 760.00mm Hg

Freezing/Melting Point: -20 - -18 deg C

Autoignition Temperature: 440 deg C (824.00 deg F)

Flash Point: 86 deg C (186.80 deg F)

Explosion Limits, lower: 1.60 vol % Explosion Limits, upper: 7.30 vol %

Decomposition Temperature:

Solubility in water: 40 G/L WATER (20?C)

Specific Gravity/Density: .9390g/cm3

Molecular Formula: CH3(CH2)3CO2H

Molecular Weight: 102.13

Section 10 - Stability & Reactivity Data

Chemical Stability:

Not available.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Oxidizing agents, reducing agents, bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 109-52-4: YV6100000

LD50/LC50:

CAS# 109-52-4: Inhalation, mouse: LC50 = 4100 mg/m3/2H; Oral,

mouse:

LD50 = 600 mg/kg.

Carcinogenicity:

Valeric acid -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecological Information:

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - MSDS Transport Information

IATA

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.*

Hazard Class: 8 UN Number: 3265 Packing Group: III

IMO

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class: 8
UN Number: 3265
Packing Group: III

RID/ADR

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class: 8 UN Number: 3265 Packing group: III

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C Risk Phrases:

R 34 Causes burns.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36 Wear suitable protective clothing.

S 45 In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 109-52-4: 1

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 109-52-4 is listed on Canada's DSL List.

CAS# 109-52-4 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 109-52-4 is listed on the TSCA inventory.

Section 16 - Other Information

HAZCOM Label Information

Product Identification: PENTANOIC ACID, 0-29

CAGE: 84898

Assigned Individual: N

Company Name: CHEM SERVICE INC

Company PO Box: 3108

Company Street Address1: N/K

Company Street Address2: WEST CHESTER, PA 19381 US

Health Emergency Telephone: 215-692-3026

Label Required Indicator: Y

Date Label Reviewed: 11/13/1995

Status Code: C

Manufacturer's Label Number: Date of Label: 11/13/1995

Year Procured: N/K
Organization Code: G

Chronic Hazard Indicator: N Eye Protection Indicator: YES Skin Protection Indicator: YES

Respiratory Protection Indicator: YES

Signal Word: WARNING Health Hazard: Slight Contact Hazard: Slight Fire Hazard: Moderate Reactivity Hazard: None