



JUNSEI

Material safety data sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Catalog Numbers: 27340
Catalog Name: L-Glutamine

Company Identification:

Junsei Chemical Co., Ltd.
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CREATION DATE: August 25, 2006

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: L-Glutamine
SYNONYMS: L(+)-Glutamic acid-5-amide
CAS NUMBER: 56-85-9
US TSCA: inventory
EC NUMBER (EINECS): 200-292-1
JAPAN NUMBER (ENCS): 9-1581
PERCENTAGE: (GR)99.0+%

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Not available.

SECTION 4 FIRST AID MEASURES

Eyes:

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

Skin:

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

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure to fresh air immediately.

Notes to Physician:

SECTION 5 FIRE FIGHTING MEASURES

General Information:

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

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6 ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

SECTION 7 HANDLING AND STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin

and eyes.

Storage:

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

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear a chemical apron.

Respirators:

A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Appearance:	white
Odor:	odorless
pH:	4- 6
Vapor Pressure:	Not available.
Viscosity:	Not available.
Boiling Point:	Not available.
Freezing/Melting Point:	185-186 deg C(dec.)
Autoignition Temperature:	Not available.
Flash Point:	Not applicable.
Explosion Limits, lower:	Not available.
Explosion Limits, upper:	Not available.
Decomposition Temperature:	Not available.
Solubility in water:	IN WATER: 3.73g/100g (20degC)
Specific Gravity/Density:	1.364
Molecular Formula:	C5H10N2O3
Molecular Weight:	146.15

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

LD50/LC50:

LD50 = 7500mg/kg oral rat

LD50 = 21.7g/kg oral mouse

TDLo = 27mg/kg /1w-l oral man

Mutation

Sister chromatid exchange: human lymphocyte 10mg/L

Carcinogenicity:

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

SECTION 12 ECOLOGICAL INFORMATION

Not available.

SECTION 13 DISPOSAL CONSIDERATIONS

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

SECTION 14 TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

SECTION 15 REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 73-22-3: 0

United Kingdom Occupational Exposure Limits

Canada

CAS# 73-22-3 is listed on Canada's DSL List.

CAS# 73-22-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 73-22-3 is listed on the TSCA inventory.

SECTION 16 OTHER INFORMATION
