1. Substance / preparation and company name
   Product: L-Threonine 98.5 % Feed Grade
   Manufacturer: CJ(SHENYANG)BIOTECH CO., LTD.
   #38 Yunong Road Shenbei New District ShenYang Liaoning China 110164
   Emergency Phone: +86-24-31410001

2. Possible hazard
   Classification of the substance or mixture
   REGULATION(EC)No 1272/2008

   Classification according to EU Directives 67/548/EEC or 1999/45/EC
   For the full text of the R-phrase and H-Statement mentioned in this Section, see Section 16
   R-phrase(s): none

   Label Elements
   Signal Word: none

   Hazard Statements
   Other Hazards: No information available

3. Composition / information on ingredients
   Composition: L - Threonine 98.5 %
   Chemical Family: Amino Acid (Essential)
   Formula: C4H9NO3
   Molecular Weight: 119.12
   Structure Formula: CH3 - CH (OH) CH - (NH2) COOH

4. First aid measures
   General recommendation: Avoid contact
   After inhalation: Remove individual to fresh air
   After skin contact: Wash area thoroughly with soap and water
   After eye contact: Wash eye with water for 15 minutes
After swallowing: Drink large amounts of water

5. Fire fighting measures
Flash point: None
Auto ignition Temperature: N/A
Flammable limit in air: None Flammable
Extinguishing Media: Water
Special Fire Fighting Procedure: Should wear protective clothing and respiratory protection to protect from fumes of HCl and NOx
Unusual Fire and Explosion Hazard: Not a fire hazard

6. Accidental release measures
Method of cleaning up: Wash area with water. Avoid high pressure rinsing

7. Handling & storage
Handling: Recommended to wear glove and face mask if excessive handling is necessary
Storage: Recommended to be stored in clean and dry condition, under ambient temperature, sheltered from sunlight and avoid from harmful substance
Work place: Keep to be clean.

8. Exposure control and personal protection
Precautionary measures: Give adequate ventilation to the premises where the product is stored and/or handled.
Respiratory protection: Not needed for normal use.
Protection or hands: Not needed for normal use.
Eye protection: Not needed for normal use.
Protection for skin: No special precaution must be adopted for normal use.

9. Physical and chemical properties
Bulk Density: 0.700 – 0.900 g/ml
Appearance and Odor: White or pale brownish powder, Odorless, Having characteristic taste
Solubility in Water: 9.76 g/100 g water (20 oC)
Percent Volatile: N/A
Evaporation Rate: N/A
Melting point: 256 oC

10. Stability and reactivity
Stability: Stable if stored in dry conditions in sealed or closed containers
Conditions to avoid: Heating to decomposition
Substances to avoid: Strong oxidizers
Hazardous reaction: None

11. Toxicology
Eyes : Very slightly irritant product
Skin : Not a skin sensitizer

12. Ecology
Degradability : High bio degradable
Bio accumulation : No
Toxicology : Not toxic for wild animals and plants
LD 50 : 3 g/ kg ( IP in Rat )

13. Eliminations and considerations
Recover if possible. In so doing, comply with the local and national regulations currently in force

14. Transports information
Proper delivering name : L - Threonine
Proper delivering condition : Stored in closed and sealed container
Means of transportation : Sea : By ship
Air : By aeroplane
Packaging : 25 kg net with 3-ply Kraft paper bag & 1-ply PE
800 / 850 kg P.P Woven bag PE laminated

15. Regulatory informations
88/379/EEC (Classification and Labelling):
The preparation should not be considered as dangerous accordingly to dir. 88/379/EEC.

Where applicable, refer to the following regulatory provisions:
Directive 82/501/EEC (Activities linked to risks of serious accidents) and subsequent amendments.

16. Other information
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely
to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure
that this information is appropriate and complete with respect to the specific use intended. This MSDS cancels
and replaces any preceding release