Material Safety Data Sheet

L-Valine MSDS

1. SUBSTANCE IDENTIFICATION

- 1.1. Product Name: L-Valine
- 1.2. Description: L-Valine is a proteinogenic amino acid manufactured through chemical synthesis.
- 1.3. Chemical Formula: C5H11NO2
- 1.4. Molecular weight: 117.15
- 1.5. CAS #: 72-18-4
- 1.6. EINECS #: 200-773-6
- 1.7. Manufactured by: Foodchem International Corporation, Shanghai China.
- 1.8. Supplied by: Foodchem International Corporation, Shanghai China.
- 1.9. Usage: In food as nutritional supplements

2. Composition

- 2.1. L-Valine: >99%
- 2.2. Hazardous impurities: Negative

3. Physical/Chemical Characteristics

- 3.1. Physical State: Powder
- 3.2. Appearance: white powder
- 3.3. Odor: Odorless.
- 3.4. pH: Not available
- \bullet 3.5. Melting point/range: 315 $^{\circ}$ C (599 $^{\circ}$ F)
- 3.6. Boiling point: Decomposes
- 3.7. Bulk density: 1.23g/cm3
- 3.8. Solubility: Partially soluble in cold wate

4. Stability/Reactivity

- 4.1. Chemical Stability: Stable under normal temperatures and pressures
- 4.2. Shelf Life: 24 months period
- 4.3. Hazardous decomposition: Carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...)
- 4.4. Hazardous polymerization: Will not occur
- 4.5. Incompatible with: Oxidizers

5. Handling/Storage

- 5.1. Storage: Store in a cool and dry place and Keep away from strong light and heat
- 5.2. Handling precaution: Keep away from sources of ignition. Ground all equipment containing material.

6. Exposure Control

- 6.1. Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
- 6.2. Respiratory protection: NIOSH/MSHA or European Standard EN 149 approved respirator
- 6.3. Eye Protection: Protective eyeglasses or chemical safety goggles
- 6.4. Skin Protection: Wear appropriate protective gloves and clothes to minimize skin contact.
- 6.5. Other: Consult professionals if L-Valine need to be handled under some special conditions.

7. Hazards Identification



- 7.1. Hazardous overview: L-Valine is Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation.
- 7.2. Contact with eyes: May cause eye irritation.
- 7.3. Contact with skin: No known effect on skin contac
- 7.4. Ingestion: May irritate the tissues of the mouth, esophagus, and other tissues of the digestive system
- 7.5. Inhalation: May cause irritation to the respiratory tract and gastrointestinal
- 7.6. Other: Not Applicable

8. First Aid Measures

- 8.1. Contact with eyes: Flush immediately with plenty of water for 15 minutes and seek medical advice
- 8.2. Contact with skin: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops
- 8.3. Ingestion: Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
- 8.4. Inhalation: Remove from exposure, move to fresh air and seek medical advice immediately.

9. Fire and Explosion Data

- 9.1. General information: May be combustible at high temperature.
- 9.2. Flash point: Not available
- 9.3. Ignition control: Avoid ignition sources where L-Valine powder might be generated.
- 9.4. Dust control: Keep the handling area with adequate ventilation
- 9.5. Extinguishing Media: Water spray, dry chemical or carbon dioxide
- 9.6. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

10. Transport Information

• 10.1. No special requirements and no restrictions on transportation by land, sea or air.

11. Ecological Information

• 11.1. L-Valine is fully degradation biodegradable. The products of degradation are more toxic.

12. Other Information

• 12.1. This Safety Data Sheet of L-Valine is based upon a limited review of Foodchem Internation Corporation files and standard Toxicological handbooks. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Foodchem International Corporation be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Foodchem International Corporation has been advised of the possibility of such damages.

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