

VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 05/08/2015 Revision date: : Version: 1.0 CLM-7861-N

| | ostance/mixture and of the company/undertaking | |
|--|---|--|
| 1.1. Product identifier | | |
| Product form Substance name | | |
| EC No | : VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY | |
| CAS No | : 200-419-0 (Unlabeled) | |
| Product code | : 59-30-3 (Unlabeled) : CLM-7861-N | |
| Formula | : CLM-7601-N : C14*C5H19N7O6 | |
| | | |
| Synonyms | : Vitamin M / PteGlu / Pteroyl-L-glutamic acid | |
| 1.2. Relevant identified uses of the subs | stance or mixture and uses advised against | |
| 1.2.1. Relevant identified uses | | |
| No additional information available | | |
| 1.2.2. Uses advised against | | |
| 1.2.2. Uses advised against No additional information available | | |
| | | |
| 1.3. Details of the supplier of the safety | data sheet | |
| Cambridge Isotope Laboratories, Inc. | | |
| 50 Frontage Road Andover, MA 01810 | | |
| USA | | |
| USA: 1-800-322-1174 Int: 1-978-749-8000 | | |
| <u>cilsales@isotope.com</u> www.isotope.com | | |
| Emergency telephone number | | |
| Emergency numbers: | | |
| Chemtrec: 1-800-424-9300 (24 hours) | | |
| International: 1-703-741-5970 (24 hours) | | |
| SECTION 2: Hazards identification | | |
| 2.1. Classification of the substance or mixture | | |
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | | |
| Not classified | | |
| | | |
| Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] | | |
| Not classified | | |
| | | |

GHS-US classification

Not classified

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

CHEMICAL PURITY CLM-7861-N

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| SECTION 3: Composition/information on ingredients | | | |
|--|--|-----|---|
| 3.1. Substances | | | |
| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
| VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY | (CAS No) 59-30-3 (Unlabeled) (EC No) 200-419-0 (Unlabeled) (EC Index No) | 100 | Not classified |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY | (CAS No) 59-30-3 (Unlabeled) (EC No) 200-419-0 (Unlabeled) (EC Index No) | 100 | Not classified |

Full text of R- and H-statements: see section 16

| Name | Product identifier | % | GHS-US classification |
|--|------------------------------|-----|-----------------------|
| VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY (Main constituent) | (CAS No) 59-30-3 (Unlabeled) | 100 | Not classified |

Full text of H-statements: see section 16

| 3.2. Mixtures | |
|--|---|
| Not applicable | |
| SECTION 4: First aid measures | |
| 4.1. Description of first aid measure | S |
| First-aid measures general | : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. |
| First-aid measures after inhalation | : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| First-aid measures after skin contact | : Wash with soap and plenty of water. Consult a physician. |
| First-aid measures after eye contact | : Flush eyes with water as a precaution. |
| First-aid measures after ingestion | : Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| 4.2. Most important symptoms and e | effects, both acute and delayed |
| No additional information available | |
| 4.3. Indication of any immediate me | dical attention and special treatment needed |
| No additional information available | |
| SECTION 5: Fire-fighting measur | es |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. |
| 5.2. Special hazards arising from the | e substance or mixture |
| Reactivity | : Not available. |
| 5.3. Advice for firefighters | |
| Firefighting instructions | : The product itself does not burn. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| SECTION 6: Accidental release m | leasures |
| 6.1. Personal precautions, protective | e equipment and emergency procedures |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Avoid dust formation. Avoid breathing vapors, mist or gas. |
| 6.1.2. For emergency responders | |
| No additional information available | |
| 6.2. Environmental precautions | |
| Prevent entry to sewers and public waters. | |
| 6.3. Methods and material for contai | nment and cleaning up |
| For containment | : Sweep up and shovel. Keep in suitable, closed containers for disposal. |
| | |

CHEMICAL PURITY CLM-7861-N

Safety Data Sheet

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| 6.4. Reference to other sections | |
|--|--|
| No additional information available | |
| SECTION 7: Handling and storage | |
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |
| 7.2. Conditions for safe storage, inclu | ding any incompatibilities |
| Storage conditions | : Store at room temperature away from light and moisture. |
| 7.3. Specific end use(s) | |
| No additional information available | |
| SECTION 8: Exposure controls/pe | sonal protection |
| 8.1. Control parameters | |
| No additional information available | |
| | |
| 8.2. Exposure controls Personal protective equipment | : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus. |
| | |
| Hand protection | : Wear suitable protective clothing and gloves. |
| Eye protection | : Wear safety glasses with side shields (or goggles) and a face shield. |
| Skin and body protection | : Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Respiratory protection | : When appropriate, use NIOSH/CEN approved respirator. |
| SECTION 9: Physical and chemica | properties |
| 9.1. Information on basic physical and | |
| Physical state | : Solid |
| Appearance | : Solid. |
| Molecular mass | : 446.36 g/mol (Labeled) |
| Colour | : white. |
| Odour | : No data available |
| Odour threshold | : No data available |
| рН | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : > 285 °C (> 545 °F) |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| | |

 vapour pressure
 : No data available

 Relative vapour density at 20 °C
 : No data available

 Relative density
 : No data available

 Solubility
 : No data available

 Log Pow
 : No data available

 Log Kow
 : No data available

 Viscosity, kinematic
 : No data available

Viscosity, dynamic

Explosive properties

Oxidising properties

: No data available

: No data available

CHEMICAL PURITY CLM-7861-N

Safety Data Sheet

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| 26, 2012 / Rules and Regulations | | |
|--|---|--|
| Explosive limits | : No data available | |
| 9.2. Other information | | |
| No additional information available | | |
| SECTION 10: Stability and reactivity | y in the second s | |
| 10.1. Reactivity | | |
| Not available. | | |
| 10.2. Chemical stability | | |
| Stable if stored under recommended conditions | · | |
| 10.3. Possibility of hazardous reactions | | |
| No additional information available | | |
| 10.4. Conditions to avoid | | |
| Not available. | | |
| 10.5. Incompatible materials | | |
| Strong oxidizing agent. | | |
| 10.6. Hazardous decomposition product | S | |
| Nitrogen oxides. carbon oxides. | | |
| SECTION 11: Toxicological informa | tion | |
| 11.1. Information on toxicological effects | S | |
| Acute toxicity | : Not classified | |
| Skin corrosion/irritation | : Not classified | |
| Serious eye damage/irritation | : Not classified | |
| Respiratory or skin sensitisation | : Not classified | |
| Germ cell mutagenicity | : Not classified | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : Not classified | |
| STOT-single exposure | : Not classified | |
| STOT-repeated exposure | : Not classified | |
| Aspiration hazard | : Not classified | |
| | | |
| SECTION 12: Ecological information | n | |
| SECTION 12: Ecological information 12.1. Toxicity | | |
| | | |

| 12.2. | Persistence and degradability | |
|----------|------------------------------------|--|
| No addit | ional information available | |
| 12.3. | Bioaccumulative potential | |
| No addit | ional information available | |
| 12.4. | Mobility in soil | |
| No addit | ional information available | |
| 12.5. | Results of PBT and vPvB assessment | |
| No addit | ional information available | |
| 12.6. | Other adverse effects | |
| | ional information available | |
| SECTI | ON 13: Disposal considerations | |
| 13.1. | Waste treatment methods | |
| Regional | legislation (waste) : | Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations. |

No additional information available

CHEMICAL PURITY CLM-7861-N

Safety Data Sheet

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| SECTION 14: Transport information | |
|---|---|
| In accordance with ADR / RID / IMDG / IATA / AD | DN |
| 14.1. UN number | |
| Not applicable | |
| 14.2. UN proper shipping name | |
| Not applicable | |
| | |
| 14.3. Additional information | |
| Other information | : No supplementary information available. |
| Special transport precautions | : Not dangerous goods. |
| | |
| Overland transport | |
| No additional information available | |
| | |
| Transport by sea | |
| No additional information available | |
| Air transport | |
| No additional information available | |
| | |
| 14.4. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.5. Special precautions for user | |
| Special transport precautions | : Not dangerous goods. |
| | |
| 14.6. Transport in bulk according to Anne | x II of MARPOL 73/78 and the IBC Code |
| Not applicable | |
| SECTION 15: Regulatory information | |
| 15.1. US Federal regulations | |
| No additional information available | |
| | |
| | |
| 15.2. International regulations | |
| CANADA | |
| | |

VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PUF Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations VITAMIN B9 (FOLIC ACID) (GLUTAMIC ACID-13C5, 99%) 95% CHEMICAL PURITY(59-30-3 (Unlabeled)) U.S. - California - Proposition 65 - Carcinogens List No U.S. - California - Proposition 65 - Developmental No Toxicity U.S. - California - Proposition 65 - Reproductive No Toxicity - Female U.S. - California - Proposition 65 - Reproductive No Toxicity - Male State or local regulations U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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| SECTION 16: Other information | |
|-------------------------------|--|
| Other information | : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound. |
| NFPA health hazard | : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials. |
| NFPA fire hazard | : 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. |
| NFPA reactivity | : 0 - Material that in themselves are normally stable, even under fire conditions. |
| HMIS III Rating | |
| Health | : 0 Minimal Hazard - No significant risk to health |
| Flammability | : 0 Minimal Hazard |
| Physical | : 0 Minimal Hazard |

CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product