SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifiers

Product name:	MEM NEAA, Non Essential Amino Acid Solution (100x) w/o: L-Glutamine, GMP grade
Product number:	CT-32100
Brand:	PAN-Celltech

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses:	Laboratory chemicals, Manufacture of substances

1.3. Details of the supplier of the safety data sheet

Company	PAN-Celltech GmbH Am Gewerbepark 6 94501 Aidenbach GERMANY
Telephone:	+49-(0)8543-6016-30
Fax:	+49-(0)8543-6016-49
E-mail:	info@pan-celltech.de

1.4. Emergency telephone number

Emergency phone:	+49-(0)8543-6016-30 or +49 151 51557123

2. HAZARDS INDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP).

Skin corrosion/irritation	Skin Irrit. 2	H315	Causes skin irritation.
Serious wye damage/ eye irritation	Eye Irrit. 2	H319	Causes serious eye irritation.

2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP).

Hazard pictogram:



GHS07

Signal word: Warning

Hazard statements: H315 Causes skin irritation.
H319 Causes serious eye irritation:

Precautionary statements:	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P303+ P361+	
	P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
	P305+ P351+	
	P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/doctor.
	P321	Specific treatment (see ... on this label).

Other hazards
None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Synonyms:
Not applicable, product is a mixture.

3.2. Mixtures

Chemical name	CAS-No.	Concentration
Amino Acids	Not applicable	0,1 – 1 Weight-%

4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. General notes

4.1.2. If inhaled
If breathed in, move person into fresh air. If breathing becomes difficult, call a physician. If not breathing, give artificial respiration.

4.1.3. In case of skin contact
In case of contact, immediately wash skin with soap and copious amounts of water.

4.1.4. In case of eye contact
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician if symptoms persist.

4.1.5. If swallowed
If swallowed, wash out mouth with water provided person is conscious. Call a physician if symptoms persist.

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.1.2. Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.

6.2. Environmental precautions

Do not let product enter drains

6.3. Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Normal measures for preventive fire protection.
Information on protection measures are listed in section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: +2 °C - +8 °C

7.3. Specific end use(s)

No further information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters: not required.

8.2. Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Use impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Form:	liquid
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	no data available
Initial boiling point and boiling range	no data available
Flash point	no data available
Evaporation rate	no data available
Flammability	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available

Explosive properties	no data available
Oxidizing properties	no data available

9.2. Other information

No data available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	no data available
Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	May cause eye irritation.
Inhalation:	Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion:	May be harmful if swallowed.
Respiratory or skin sensitization	no data available
Germ cell mutagenicity	no data available

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as p robable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	no data available
Specific target organ toxicity - repeated exposure	no data available
Aspiration hazard	no data available

11.2. Information on other hazards

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	CAS-No.:	LC/EC
L-Asparagin – Monohydrat	5794-13-8	LC_{50}: 1.690.000 mg/L 4 d EC_{50}: 100 mg/L 3 d EC_{50}: 6.070.000 mg/L 2 d **NOEC/IC50** NOEC: 100 mg/L 3 d (Pseudokirchneriella subcapitata) OECD-Prüfrichtlinie 201 **ErC50/LOEC** ErC_{50}: >100 mg/L 3 d (Alge/Wasser-Pflanze, Pseudokirchneriella subcapitata) OECD-Prüfrichtlinie 201
L-Glutamic Acid	56-86-0	**LC/EC** LC_{50}: 31 mg/L 3 d (Alge/Wasserpflanze) LC_{50}: 100 mg/L 2 d (Alge/Wasserpflanze) LC_{50}: 100 mg/L 4 d (Fisch)
L-Prolin	147-85-36	LC_{50}: 10.500 mg/L 4 d (Fisch) EC_{50}: >100 mg/L 2 d (Krebsgtiere)

12.2. Persistence and degradability
No data available

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6. Endocrine disrupting properties
No data available

12.7. Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Product/unused product
Recommendation:
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Recommendation:
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1. UN number or ID number

ADR/RID: - IMDG: - IATA: -

14.2. UN Proper shipping name

ADR/RID: Not dangerous Goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3. Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4. Packing group

ADR/RID: - IMDG: - IATA: -

14.5. Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6. Special precautions for user No data available

14.7. Maritime transport in bulk according to IMO instruments

No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Water hazard class WGK nwg: Non-hazardous to water
Classification according to Annex 1 of the Ordinance on Facilities for Handling Substances Hazardous to Water (AwSV) self-classification.

15.2. Chemical safety assessment

No data available

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PAN Celltech GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See www.pan-biotech.com or reverse side of invoice or packing slip for additional terms and conditions of sale.