06.04.2011	Kit Components
Product code	Description
PROB-0XXX	TOTAL PROTEIN PLUS (Kit with or without Std)
Components:	
PROB-5XXX	TOTAL PROTEIN PLUS - R
PRTB-4XXX	TOTAL PROTEIN STANDARD 6g/dL - Std

Printing date 06.04.2011

ELITechGroup

SEPPIM

Version number 6

Revision: 23.03.2011

1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: TOTAL PROTEIN PLUS - R

- · Article number: PROB-5XXX
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- \cdot Application of the substance / the preparation Reagent for IN VITRO diagnostic

\cdot Details of the supplier of the safety data sheet

Manufacturer/Supplier: SEPPIM S.A.S.
4 Rue Auguste Mottin
F-61500 Sées
FRANCE
Tel: +33 2 33 81 21 00
Fax: +33 2 33 28 77 51
seppim.msds@elitechgroup.com

· Further information obtainable from: Product safety department

• Emergency telephone number: Contact your distributor or poison control center in your country.

2 Hazards identification

· Classification of the substance or mixture

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

C; Corrosive

- R35: Causes severe burns.
- · Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



*Risk phrases:*35 Causes severe burns.

- · Safety phrases:
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 1310-73-2 EINECS: 215-185-5	Sodium hydroxide	C R35	≤ 2,5%
Index number: 011-002-00-6			
CAS: 7758-99-8 EINECS: 231-847-6 Index number: 029-004-00-0	Copper (II) sulfate	🗙 Xn R22; 🗙 Xi R36/38; 握 N R50/53	≤ 2,5%

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Trade name: TOTAL PROTEIN PLUS - R

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

If required, provide artificial respiration.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

- If symptoms appear, seek medical advice.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:
- Rinse out mouth.
- Call for a doctor immediately.
- · Information for doctor: Treat symptomatically.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- · Advice for firefighters
- · Protective equipment: As in any fire, wear a respiratory protective device, and full protective gear.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Avoid physical contact with material. **Environmental precautions:**
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles.
- Clean the affected area carefully.
- · 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

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care. Avoid physical contact with material.
- Observe the warnings on the label.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Provide alkali-resistant floor.
- · Information about storage in one common storage facility: Do not store together with acids.
- Further information about storage conditions: Keep container tightly sealed.

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Trade name: TOTAL PROTEIN PLUS - R

- Protect the product from light. Avoid exposure to heat.
- · Recommended storage temperature: 2-25 °C
- \cdot Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities:
- Eyewash fountain and safety shower in the area of storage and use.

· Control parameters

	T 1. /	• .1 1•	•, 1		•, •	1	1 1
•	Ingredients	with lin	nit values	that reaur	e monitoring	at the 1	workplace:
	Lingi carcinos		in raines	cicar i cquui	c monthor my	ar nec i	, or hep the cor

1310-73-2 Sodium hydroxide

WEL (Great Britain) Short-term value: 2 mg/m³

VME (France) 2 mg/m³

· Additional information: The lists valid during the making were used as basis.

· Exposure controls

- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.
- Do not inhale gases / fumes / aerosols.
- · Respiratory protection:

Under normal conditions, the use of these products should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation *Material of gloves*
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- · Penetration time of glove material
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

 \cdot Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:

Form:
Fluid
Colour:
Blue
Odour:
Uncharacteristic.

>12

- · pH-value:
- Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.
 Flash point: Not applicable.
 Self-igniting: Product is not selfigniting.
- *Danger of explosion:* Product does not present an explosion hazard.
- *Density at 20*•*C*: 1,022 g/cm³

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Trade name: TOTAL PROTEIN PLUS - R

· Solubility in / Miscibility with

- water: Fully miscible.
- Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Reacts with acids.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Strong oxidizing agents, strong acids Metals.

· Hazardous decomposition products:

Dangerous decomposition products may be formed. Carbon oxides (COx)

· Additional information:

Stable at the recommended storage temperature and if protected from light. Avoid exposure to heat.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

1310-73-2 Sodium hydroxide

Oral LD50 2000 mg/kg (rat)

7758-99-8 Copper (II) sulfate

Oral LD50 960 mg/kg (rat)

LDL0 1088 mg/kg (human)

Dermal LD50 > 2000 mg/kg (rat)

· Primary irritant effect:

· on the skin: Strong caustic effect on skin and mucous membranes.

 \cdot on the eye: Strong caustic effect.

- · Inhalation: May cause irritation of mucous membranes.
- · Ingestion: May cause burns.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) Data not available

12 Ecological information

· Toxicity	7
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· Acauatic	toxicity:

Acquaire toxicity:
1310-73-2 Sodium hydroxide

EC50/48h 76 mg/l (Daphnia)

LC50/96h 45,4 mg/l (Onchorhyncus mykiss)

7758-99-8 Copper (II) sulfate

EC50/48h 0,02 mg/l (Daphnia)

LC50/96h 0,11 mg/l (Onchorhyncus mykiss)

· Persistence and degradability Data not available

 \cdot Behaviour in environmental systems:

 \cdot **Bioaccumulative potential** Data not available

• *Mobility in soil* Data not available

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Trade name: TOTAL PROTEIN PLUS - R

- Additional ecological information:
 General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · Results of PBT and vPvB assessment
- · *PBT*: Not applicable.
- · vPvB: Not applicable.

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.
- · Primary packaging: Plastic vial (composed of polyethylene high density).

14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class:	8 Corrosive substances.
· Danger code (Kemler):	80
· UN-Number:	1824
• Packaging group:	III
· Hazard label:	8
· UN proper shipping name:	1824 SODIUM HYDROXIDE SOLUTION
\cdot Excepted quantities (EQ):	E1
\cdot Limited quantities (LQ)	LQ7
• Tunnel restriction code	Е

· Maritime transport IMDG:



· IMDG Class:	8
· UN Number:	1824
· Label	8
• Packaging group:	III
· EMS Number:	F-A,S-B
• Marine pollutant:	No
· Segregation groups	Alkalis
· Proper shipping name:	SODIUM HYDROXIDE SOLUTION

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class:	8
· UN/ID Number:	1824
· Label	8
• Packaging group:	III
• Proper shipping name:	SODIUM HYDROXIDE SOLUTION
· Special precautions for u	ser Warning: Corrosive substances.

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Version number 6

Revision: 23.03.2011

Trade name: TOTAL PROTEIN PLUS - R

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

R22 Harmful if swallowed.

R35 Causes severe burns.

R36/38 Irritating to eyes and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Department issuing MSDS: Product safety department

· Contact: Product safety department

• * Data compared to the previous version altered.

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Printing date 06.04.2011

ELITechGroup

SEPPIM

Version number 4

Revision: 27.01.2011

1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

- · Trade name: TOTAL PROTEIN STANDARD 6g/dL Std
- · Article number: PRTB-4XXX
- Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Reagent for IN VITRO diagnostic
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: SEPPIM S.A.S. 4 Rue Auguste Mottin F-61500 Sées FRANCE Tel: +33 2 33 81 21 00 Fax: +33 2 33 28 77 51 seppim.msds@elitechgroup.com

· Further information obtainable from: Product safety department

• Emergency telephone number: Contact your distributor or poison control center in your country.

2 Hazards identification

- \cdot Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment:
- The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- · Classification system:
- The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- · Label elements
- · Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives as issued in the latest valid version.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · *vPvB:* Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances.
- · Dangerous components: None in reportable quantity.
- · Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:
- Generally the product does not irritate the skin.
- Rinse with water. If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms appear, seek medical advice.
- · After swallowing:
- Rinse out mouth.
- If symptoms appear, seek medical advice.
- · Information for doctor: Treat symptomatically.

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Revision: 27.01.2011

Trade name: TOTAL PROTEIN STANDARD 6g/dL - Std

(Contd. of page 1)

5 Firefighting measures

· Extinguishing media

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Use fire extinguishing methods suitable to surrounding conditions.
- \cdot Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- · Advice for firefighters
- · Protective equipment: As in any fire, wear a respiratory protective device, and full protective gear.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation
- Avoid physical contact with material.
- \cdot Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Clean the affected area carefully.
- · Reference to other sections
- No dangerous substances are released.
- 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

· Handling:

- · Precautions for safe handling
- Open and handle receptacle with care. Avoid physical contact with material. Observe the warnings on the label.
- · Information about fire and explosion protection: No special measures required.

· Conditions for safe storage, including any incompatibilities

- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Protect the product from light. Avoid exposure to heat.
- *Recommended storage temperature:* 2-25 °C
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- Wash hands before breaks and at the end of work.
- Keep away from foodstuffs, beverages and feed.
- · Respiratory protection:

Under normal conditions, the use of these products should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Revision: 27.01.2011

Trade name: TOTAL PROTEIN STANDARD 6g/dL - Std

(Contd. of page 2)

 \cdot Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • *Material of gloves*

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. • *Penetration time of glove material*

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. • *Eye protection:* Goggles recommended during refilling

• Body protection: Protective work clothing

9 Physical and chemical properties

l and chemical properties
Fluid
Colourless
Uncharacteristic.
~7
Undetermined. Undetermined.
Not applicable.
Product is not selfigniting.
Product does not present an explosion hazard.
1,016 g/cm ³
Fully miscible. No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Sodium azide, contains in the product (<0.1%), can react with copper and lead plumbing to form explosive metal azides. If discharge in the canalisations, rinse with plenty of water.

- \cdot Conditions to avoid No further relevant information available.
- · Incompatible materials: Strong oxidizing agents, acids, bases.
- · Hazardous decomposition products: Dangerous decomposition products may be formed.
- · Additional information:

Stable at the recommended storage temperature and if protected from light. Avoid exposure to heat.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

\cdot LD/LC50	values relevan	t for classification:	
26628-22	-8 sodium azio	e	
Oral	LD50	23,7 mg/kg (bird)	
		27 mg/kg (mouse)	
Dermal	LD50	50 mg/kg (rat)	
		20 mg/kg (rabbit)	
			(Contd. on page 4)

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Trade name: TOTAL PROTEIN STANDARD 6g/dL - Std

T 1 1 .	1.050	(Contd. of page
Inhalative	LC50	32,4 mg/m3 (mouse)
		37 mg/m3 (rat)
	LD50 intraperitoneal	28 mg/kg (mouse)
· Primary ir	ritant effect:	
\cdot on the skin	: No irritant effect.	
\cdot on the eye:	No irritating effect.	
	on: No sensitizing effe	
	toxicological inform	
		ssification according to the calculation method of the General EU Classification
		sued in the latest version.
		g to specifications, the product does not have any harmful effects to our experience and
	ation provided to us.	· · · · · · · · · · · · · · · · · · ·
		ium azide may cause nausea, vomiting and in certain circumstances respiratory
	, high pulse rate and/o	
· CMK ejjec	is (carcinogenity, muu	agenicity and toxicity for reproduction) Data not available
2 Ecologic	al information	
- Deologic		
· Toxicity		

· Acquaic toxicity.

26628-22-8 sodium azide

EC50/48h 4,2 mg/l (Daphnia)

LC50/96h 3,92 mg/l (Onchorhyncus mykiss)

- 5,46 mg/l (Pimephales promelas)
- · Persistence and degradability Data not available
- · Behaviour in environmental systems:
- · Bioaccumulative potential Data not available
- *Mobility in soil* Data not available
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · *Recommendation* Disposal must be made according to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents:

Sodium azide, contained in the product (<0.1%), can react with copper and lead plumbing to form explosive metal azides. If discharge in the canalisations, rinse with plenty of water.

· Primary packaging: Plastic vial (composed of polyethylene high density).

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- · Special precautions for user Not applicable.

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- EU

Printing date 06.04.2011

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Version number 4

Trade name: TOTAL PROTEIN STANDARD 6g/dL - Std

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department

· Contact: Product safety department

 \cdot * Data compared to the previous version altered.

Revision: 27.01.2011

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