

Kit Summary

Product Code(s) AB240996
Product name CHO HCP ELISA kit (Host cell protein)

TMB Substrate

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
N-methyl-2-pyrrolidone	212-828-1	872-50-4	5	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360D)	-
Hydrogen peroxide-Urea	204-701-4	124-43-6	0.5	Ox. Sol. 3 (H272) Skin Corr. 1B (H314)	-
3,3',5,5'-Tetramethylbenzidine	259-364-6	54827-17-7	0.2	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-

Stop Solution

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
Sulphuric acid	231-639-5	7664-93-9	4.9	Skin Corr. 1A (H314)	-

GHS / CLP - GHS - Classification



Signal Word
 Danger

Hazard statements
 H360D - May damage the unborn child

Precautionary Statements - EU (§28, 1272/2008)

P202 - Do not handle until all safety precautions have been read and understood
 P281 - Use personal protective equipment as required
 P308 + P313 - IF exposed or concerned: Get medical advice/ attention
 P405 - Store locked up
 P501 - Dispose of contents/ container to an approved waste disposal plant

2.3 Other information

A safety datasheet follows for all potentially hazardous components – all other components are non-hazardous.

Chemical Name	Fire Service Law	ISHL organic solvents	Industrial Safety & Health Act Dangerous & Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law
N-methyl-2-pyrrolidone	>40% 4-3	Not applicable	X	Not applicable	Not applicable	Not applicable

Sulphuric acid	Not applicable	Not applicable	$\geq 1\%$ X	Not applicable	Not applicable	Not applicable
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X; applicable

TRANSPORT INFORMATION

ADR Not dangerous goods

IATA Not dangerous goods

DOT Not dangerous goods

Safety Data Sheet

Issuing date No data available

Revision Date 20-Jan-2021

Version 2

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

1.1 Product identifier

Product Code(s) AB240996-CP313295

Product name TMB Substrate

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use No information available

Uses advised against No information available

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS / CLP - GHS - Classification

Reproductive toxicity

Category 1B

2.2 Label elements



Signal Word
Danger

Hazard statements

H360D - May damage the unborn child

Precautionary Statements - EU (§28, 1272/2008)

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3 Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
N-methyl-2-pyrrolidone	212-828-1	872-50-4	<5	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360D)	-
Hydrogen peroxide-Urea	204-701-4	124-43-6	<0.5	Ox. Sol. 3 (H272) Skin Corr. 1B (H314)	-
3,3',5,5'-Tetramethylbenzidine	259-364-6	54827-17-7	<0.2	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-

For the full text of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

If symptoms persist, call a physician.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Ingestion

Rinse mouth. If symptoms persist, call a physician.

Inhalation

Move to fresh air. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Main symptoms

see section 2.2.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons

No information available.

5.2 Special hazards arising from the substance or mixture**Special hazard**

None in particular.

5.3 Advice for fire-fighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Keep people away from and upwind of spill/leak.

See Section 12 for additional information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

7.3 Specific end uses**Specific use(s)**

No information available.

Exposure scenario

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits National occupational exposure limits

Chemical Name	Australia	China	Hong Kong
N-methyl-2-pyrrolidone 872-50-4	25 ppm 103 mg/m ³ 75 ppm STEL 309 mg/m ³ STEL Skin		
Chemical Name	Japan	Korea	New Zealand WEL
N-methyl-2-pyrrolidone 872-50-4	TWA: 1 ppm TWA: 4 mg/m ³ Skin		TWA: 25 ppm TWA: 103 mg/m ³ STEL: 75 ppm STEL: 309 mg/m ³ Skin

Derived No Effect Level No information available

Predicted No Effect Concentration No information available

8.2 Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

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

Hand protection Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and body protection Impervious gloves. Impervious clothing.

Respiratory protection In case of inadequate ventilation wear respiratory protection. Respiratory protection with an appropriate filter that is EN143 or EN141 / NIOSH/MSHA approved should be worn.

Thermal hazards No information available

Hygiene measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State @20°C Liquid **Appearance** No information available
Odor No information available

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	

Partition coefficient: n-octanol/water No information available
Autoignition temperature No information available
Decomposition temperature No information available
Viscosity, kinematic No information available
Explosive properties No information available

9.2 Other information

VOC Content(%) No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Precautionary Statements

None under normal processing.

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

None in particular

10.6 Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Inhalation

There is no data available for this product.

Eye contact

There is no data available for this product.

Skin contact

There is no data available for this product.

Ingestion

There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N-methyl-2-pyrrolidone	3598 mg/kg (Rat)	2000 mg/kg (Rabbit) 2500 mg/kg (Rat)	3.1 mg/L (Rat) 4 h

Chronic toxicity

Corrosivity

No information available.

Sensitization

No information available.

Neurological effects

No information available.

Reproductive toxicity	Contains a known or suspected reproductive toxin. May cause harm to the unborn child.
Mutagenic effects	No information available.
Target Organ Effects	No information available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects As supplied, the preparation is not expected to present significant adverse environmental effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
N-methyl-2-pyrrolidone	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	1072: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 4000: 96 h <i>Leuciscus idus</i> mg/L LC50 static 832: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		4897: 48 h <i>Daphnia magna</i> mg/L EC50

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

Chemical Name	log Pow
N-methyl-2-pyrrolidone	0

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR Not dangerous goods
IATA Not dangerous goods
DOT Not dangerous goods

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Chemical Name	Fire Service Law	ISHL organic solvents	Industrial Safety & Health Act Dangerous & Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law
N-methyl-2-pyrrolidone	>40% 4-3	Not applicable	X	Not applicable	Not applicable	Not applicable

Extra phrase X; applicable

15.2 Chemical Safety Assessment

No information available.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H335 - May cause respiratory irritation
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H360D - May damage the unborn child
H272 - May intensify fire; oxidizer
H314 - Causes severe skin burns and eye damage

Hazard statements

H360D - May damage the unborn child

Revision Date 20-Jan-2021

Revision Note Not applicable.

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS

Safety Data Sheet

Issuing date No data available

Revision Date 20-Jan-2021

Version 3

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

1.1 Product identifier

Product Code(s) AB240996-CP313296

Product name Stop Solution

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use No information available

Uses advised against No information available

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS / CLP - GHS - Classification

Ozone	Not applicable
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2.2 Label elements

Not dangerous

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing

2.3 Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
Sulphuric acid	231-639-5	7664-93-9	4.9	Skin Corr. 1A (H314)	-

For the full text of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Clean mouth with water. Drink plenty of water.
Inhalation	Move to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

Main symptoms see section 2.2.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons

No information available.

5.2 Special hazards arising from the substance or mixture

Special hazard

None in particular.

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

See Section 12 for additional information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

7.3 Specific end uses

Specific use(s) No information available.
Exposure scenario No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits National occupational exposure limits

Chemical Name	Australia	China	Hong Kong
Sulphuric acid 7664-93-9	1 mg/m ³ 3 mg/m ³ STEL	TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³ STEL: 3 mg/m ³
Chemical Name	Japan	Korea	New Zealand WEL
Sulphuric acid 7664-93-9	Ceiling: 1 mg/m ³	STEL: 0.6 mg/m ³ TWA: 0.2 mg/m ³	TWA: 1 mg/m ³

Derived No Effect Level No information available

Predicted No Effect Concentration No information available

8.2 Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye protection

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

Hand protection

Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and body protection

Long sleeved clothing. Apron. Impervious gloves.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with an appropriate filter that is EN143 or EN141 / NIOSH/MSHA approved should be worn.

Thermal hazards

No information available

Hygiene measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

Environmental exposure controls Do not allow material to contaminate ground water system.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State @20°C	Liquid	Appearance	No information available
Odor	No information available		

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Explosive properties	No information available	

9.2 Other information

VOC Content(%)	No information available
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10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Precautionary Statements

None under normal processing.

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

None in particular

10.6 Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information

Inhalation

There is no data available for this product.

Eye contact There is no data available for this product.

Skin contact There is no data available for this product.

Ingestion There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulphuric acid	2140 mg/kg (Rat)		510 mg/m ³ (Rat) 2 h 347 ppm (Rat) 1 h

Chronic toxicity

Corrosivity No information available.

Sensitization No information available.

Neurological effects No information available.

Reproductive toxicity No information available.

Mutagenic effects No information available.

Target Organ Effects No information available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects As supplied, the preparation is not expected to present significant adverse environmental effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Sulphuric acid		500: 96 h Brachydanio rerio mg/L LC50 static		29: 24 h Daphnia magna mg/L EC50

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR Not dangerous goods

IATA Not dangerous goods

DOT Not dangerous goods

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Chemical Name	Fire Service Law	ISHL organic solvents	Industrial Safety & Health Act Dangerous & Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law
Sulphuric acid	Not applicable	Not applicable	>=1% X	Not applicable	Not applicable	Not applicable

Extra phrase X; applicable

15.2 Chemical Safety Assessment

No information available.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

Revision Date 20-Jan-2021

Revision Note Not applicable.

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

Disclaimer

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End of SDS