Oxford Biomedical Research
SUPERIOR SCIENCE. RELIABLE RESULTS.

Safety Data Sheet

Product Number:	FR22
Product Name:	Lipid Peroxidation Microplate assay
Revision:	210415

1.1 Product Identification

Product Name:	FR22 Reagent 1
Product Number:	FR22
Brand:	Oxford Biomedical Research

1.2 Supplier

Company:	Oxford Biomedical Research, Inc.
	PO Box 522
	Oxford, MI 48371
	USA
Contact:	248-852-8815
	info@oxfordbiomed.com

1.3 Relevant Uses

Identified uses: Research Assay

1.4 Emergency Contact Number

Contact: 248-852-8815

2.1 Classification of the substance or mixture

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Skin irritation (Category 2), H315

2.2 GHS Label or Precautionary Statements

Causes serious eye irritation. Harmful if swallowed, in contact with skin or if inhaled. Highly flammable liquid and vapour May cause respiratory irritation

2.3 Hazards not otherwise classified:

None

3.1 Substances: Reagent 1 (13mL)

Acetonitrile	Flam. Liq. 2; Acute Tox. 4; Eye Irrit. 2A; H225, H302, H332, H312, H319
1-Mathyl-2-Phenylindole	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects: acute or delayed

The most important symptoms/effects are listed in section 2 and 11

4.3 Recommendations for immediate medical care or special treatment

Treat symptomatically

5.1	**Extinguishing media**	Use water spray, dry chemical, or carbon dioxide
5.2	**Special hazards**	Carbon Oxides, Nitrogen Oxides, combustible

SECTION 6: Accidental Release Measures

6.1	**Personal precautions and personal protective equipment**	Standard laboratory personal protective equipment should be utilized.
6.2	**Environmental precautions**	Do not let product enter drains. Risk of explosion
6.3	**Methods for containment and clean up**	Wipe with absorbent material and dispose of in suitable container.

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed. Recommended storage temperature is 4°C.

SECTION 8: Exposure Controls/Personal Protection

8.1	**OSHA Permissible Exposure Limits**	
	Acetonitrile	Value: TWA control parameters: 20ppm
8.2	**Exposure controls**	Follow standard Good Laboratory Practices while using this product.
8.3	**Personal Protective Equipment**	
	Eye/face protection	Use eye protection approved by NIOSH or EN166.
	Skin protection	Handle with gloves. Use proper glove removal technique to avoid skin contact. Gloves should be disposed of after use according to standard Good Laboratory Practices. Wash hands after use.
	Body protection	Wear a lab coat in accordance to standard Good Laboratory Practices.
	Respiratory protection	Respiratory protection is not required.
	Control of environmental exposure	Do not let product enter drains

SECTION 9: Physical and Chemical Properties

Appearance	Liquid
Odor	Ether like
Flammability	No data available
Vapor Pressure	No data available
Odor Threshold	No data available
Vapor Density	No data available
pH	No data available
Relative Density	No data available
Melting Point	Not applicable
Freezing Point	No data available

Solubility	No data available
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate:	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

SECTION 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

SECTION 11: Toxicological Information

11.1 Toxicity

Acute toxicity	No data available
Skin irritation	May cause redness and irritation in sensitive individuals
Serious eye damage or irritation	May cause redness and irritation in sensitive individuals
Respiratory or skin sensitization	May cause respiratory in sensitive individuals
Germ cell mutagenicity	No data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
Reproductive toxicity	No data available
Specific target organ toxicity	No data available

	Aspiration hazard	No data available

SECTION 12: Ecological Information

12.1	**Toxicity**	No data available
12.2	**Persistence and degradability**	70% readily biodegradable
12.3	**Bioaccumulation potential**	No bioaccumulation expected
12.4	**Mobility in Soil**	Not expected to absorb on soil
12.5	**Other adverse effects**	No data available

SECTION 13: Disposal Considerations

13.1	**Waste treatment methods**	Dispose of product with a licensed disposal company.

SECTION 14: Transport Information

14.1	**US DOT**	Not dangerous goods
14.2	**IMDG**	Not dangerous goods
14.3	**IATA**	Not dangerous goods

SECTION 15: Regulatory Information

No known regulatory requirements.

SECTION 16: Other 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.

Revision date: 4-22-21

1.1 Product Identification

Product Name:	FR22 MDA Standard
Product Number:	FR22
Brand:	Oxford Biomedical Research

1.2 Supplier

Company:	Oxford Biomedical Research, Inc.
	PO Box 522
	Oxford, MI 48371
	USA
Contact:	248-852-8815
	info@oxfordbiomed.com

1.3 Relevant Uses

Identified uses:	Research Assay

1.4 Emergency Contact Number

Contact:	248-852-8815

2.1 Classification of the substance or mixture

Flammable liquids (Category 3), H226

2.2 GHS Label or Precautionary Statements

H2226-Flammable liquid, P210-keep away from sparks or open flame

2.3 Hazards not otherwise classified:

None

3.1 Substances: MDA Standard (200µL)

No components need to be disclosed according to the applicable regulations

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2	**Most important symptoms and effects: acute or delayed** The most important symptoms/effects are listed in section 2 and 11	
4.3	**Recommendations for immediate medical care or special treatment**	Treat symptomatically
5.1	**Extinguishing media**	Use water spray, dry chemical, or carbon dioxide
5.2	**Special hazards**	Carbon Oxides, Nitrogen Oxides, Hydrogen Chloride gas, combustible

SECTION 6: Accidental Release Measures

6.1	**Personal precautions and personal protective equipment**	Standard laboratory personal protective equipment should be utilized.
6.2	**Environmental precautions**	Do not let product enter drains. Risk of explosion
6.3	**Methods for containment and clean up**	Wipe with absorbent material and dispose of in suitable container.

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed. Recommended storage temperature is 4°C.

SECTION 8: Exposure Controls/Personal Protection

8.1	**OSHA Permissible Exposure Limits**	
	Acetonitrile	Value: TWA control parameters: 20ppm
8.2	**Exposure controls**	Follow standard Good Laboratory Practices while using this product.

8.3 Personal Protective Equipment

Eye/face protection	Use eye protection approved by NIOSH or EN166.
Skin protection	Handle with gloves. Use proper glove removal technique to avoid skin contact. Gloves should be disposed of after use according to standard Good Laboratory Practices. Wash hands after use.
Body protection	Wear a lab coat in accordance to standard Good Laboratory Practices.
Respiratory protection	Respiratory protection is not required.
Control of environmental exposure	Do not let product enter drains

SECTION 9: Physical and Chemical Properties

Appearance	Liquid
Odor	Ether like
Flammability	No data available
Vapor Pressure	No data available
Odor Threshold	No data available
Vapor Density	No data available
pH	No data available
Relative Density	No data available
Melting Point	Not applicable
Freezing Point	No data available
Solubility	No data available
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate:	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

SECTION 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

SECTION 11: Toxicological Information

11.1	**Toxicity**	
	Acute toxicity	No data available
	Skin irritation	May cause redness and irritation in sensitive individuals
	Serious eye damage or irritation	May cause redness and irritation in sensitive individuals
	Respiratory or skin sensitization	May cause respiratory in sensitive individuals
	Germ cell mutagenicity	No data available
	Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
	Reproductive toxicity	No data available
	Specific target organ toxicity	No data available
	Aspiration hazard	No data available

SECTION 12: Ecological Information

12.1	**Toxicity**	No data available
12.2	**Persistence and degradability**	70% readily biodegradable

12.3	**Bioaccumulation potential**	No bioaccumulation expected
12.4	**Mobility in Soil**	Not expected to absorb on soil
12.5	**Other adverse effects**	No data available

SECTION 13: Disposal Considerations

13.1	**Waste treatment methods**	Dispose of product with a licensed disposal company.

SECTION 14: Transport Information

14.1	**US DOT**	Not dangerous goods
14.2	**IMDG**	Not dangerous goods
14.3	**IATA**	Not dangerous goods

SECTION 15: Regulatory Information

No known regulatory requirements.

SECTION 16: Other 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.

Revision date: 4-22-21

1.1 Product Identification

Product Name:	FR22 Diluent
Product Number:	FR22
Brand:	Oxford Biomedical Research

1.2 Supplier

Company:	Oxford Biomedical Research, Inc.
	PO Box 522
	Oxford, MI 48371
	USA
Contact:	248-852-8815
	info@oxfordbiomed.com

1.3 Relevant Uses

Identified uses:	Research Assay

1.4 Emergency Contact Number

Contact:	248-852-8815

2.1 Classification of the substance or mixture

Flammable liquid category 2
Acute toxicity category 3
Skin irritation category 2
STOT Category 1

2.2 GHS Label or Precautionary Statements

May be corrosive to metals, Harmful if swallowed, Causes skin irritation, Causes serious eye damage, Toxic to aquatic life, Highly flammable liquid and vapor

2.3 Hazards not otherwise classified

None

3.1 Substances Diluent (5.5mL)

Methanol	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370 Concentration limits: >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371;
Iron (III) Chloride	Met. Corr. 1; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; H290, H302, H315, H318 Concentration limits: >= 1 %: Met. Corr. 1, H290;

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects: acute or delayed

The most important symptoms/effects are listed in section 2 and 11

4.3 Recommendations for immediate medical care or special treatment

Treat symptomatically

5.1	**Extinguishing media**	Use water spray, dry chemical, or carbon dioxide
5.2	**Special hazards**	Smoke from fires is toxic. Avoid exposure.

SECTION 6: Accidental Release Measures

6.1	**Personal precautions and personal protective equipment**	Standard laboratory personal protective equipment should be utilized.
6.2	**Environmental precautions**	Don't let product enter drains
6.3	**Methods for containment and clean up**	Wipe with absorbent material and dispose of in suitable container.

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed. Recommended storage temperature is 4°C.

SECTION 8: Exposure Controls/Personal Protection

8.1	**OSHA Permissible Exposure Limits**	
	Methanol	Value: TWA; Control Parameters: 200ppm
	Iron (III) Chloride	Value: TWA; Control Parameters 1mg/m3
8.2	**Exposure controls**	Follow standard Good Laboratory Practices while using this product.
8.3	**Personal Protective Equipment**	
	Eye/face protection	Use eye protection approved by NIOSH or EN166.
	Skin protection	Handle with gloves. Use proper glove removal technique to avoid skin contact. Gloves should be disposed of after use according to standard Good Laboratory Practices. Wash hands after use.
	Body protection	Wear a lab coat in accordance to standard Good Laboratory Practices.
	Respiratory protection	Respiratory protection is not required.
	Control of environmental exposure	Prevent product from entering drains

SECTION 9: Physical and Chemical Properties

Appearance	Clear Liquid
Odor	Characteristic
Flammability	No data available
Vapor Pressure	No data available
Odor Threshold	No data available
Vapor Density	No data available
pH	No data available
Relative Density	No data available
Melting Point	No data available

Freezing Point	No data available
Solubility	Soluble in water
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate:	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

SECTION 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

SECTION 11: Toxicological Information

11.1	**Toxicity**	
	Acute toxicity	No data available
	Skin irritation	May cause redness and irritation in sensitive individuals
	Serious eye damage or irritation	May cause redness and irritation in sensitive individuals
	Respiratory or skin sensitization	May cause respiratory in sensitive individuals
	Germ cell mutagenicity	No mutagenic affects
	Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
	Reproductive toxicity	Based on available data, classification criteria is not met
	Specific target organ toxicity	Can cause damage to eyes, can cause irritation in the respiratory tract

	Aspiration hazard	No data available

SECTION 12: Ecological Information

12.1	**Toxicity**	No data available
12.2	**Persistence and degradability**	Readily biodegradable
12.3	**Bioaccumulation potential**	No data available
12.4	**Mobility in Soil**	No data available
12.5	**Other adverse effects**	Avoid release into the environment

SECTION 13: Disposal Considerations

13.1	**Waste treatment methods**	Dispose of product with a licensed disposal company.

SECTION 14: Transport Information

14.1	**US DOT**	Not dangerous goods
14.2	**IMDG**	Not dangerous goods
14.3	**IATA**	Not dangerous goods

SECTION 15: Regulatory Information

No known regulatory requirements.

SECTION 16: Other 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.

Revision date: 5-5-21