Oxford Biomedical Research
SUPERIOR SCIENCE. RELIABLE RESULTS.

Safety Data Sheet

Product Number:	GT10
Product Name:	Glutathione Colorimetric Assay
Revision:	220421

1.1 Product Identification

Product Name:	GT10 Reagent 1
Product Number:	GT10
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

Acute toxicity oral (category 3), serious eye damage (category 1), corrosive to metals (category 1), skin corrosion (category 1B), specific target organ toxicity single exposure (category 3)

2.2 GHS Label or Precautionary Statements

Toxic if swallowed, causes serious eye damage, may be corrosive to metals, causes severe skin burns and eye damage, may cause respiratory irritation

2.3 Hazards not otherwise classified:

None

3.1 Substances: Reagent 1 (5.5mL)

4-Chloro-2-methyl-7 (trifluoromethyl) quinoline	Acute Tox. 3; Eye Dam. 1; H301, H318
Hydrochloric Acid	Met. Corr. 1; Skin Corr. 1B; Eye Dam 1; STOT SE 3; H290, H314, H318, H335

4.1 Description of first aid measures

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Take off all contaminated clothing. Consult a physician. Take victim to hospital

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. Immediately call in an ophthalmologist

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Avoid vomiting. Call a physician immediately. Do not attempt to neutralize.

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, alcohol resistant foam, dry chemical, or carbon dioxide
5.2	**Special hazards**	Hydrogen chloride gas, not combustible, ambient fire may liberate hazardous vapors

SECTION 6: Accidental Release Measures

6.1	**Personal precautions and personal protective equipment**	Standard laboratory personal protective equipment should be utilized. Do not breathe vapors. Avoid substance contact
6.2	**Environmental precautions**	Do not let product enter drains. Prevent further leakage or spillage if safe to do so.
6.3	**Methods for containment and clean up**	Wipe with inert absorbent material and dispose of in suitable container. Cover up drains

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product. Avoid contact with skin and eyes.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed. Recommended storage temperature is 4°C. No metal containers

SECTION 8: Exposure Controls/Personal Protection

8.1	**OSHA Permissible Exposure Limits**	
	Hydrochloric Acid	Value: C Control Parameters: 2ppm
8.2	**Exposure controls**	Follow standard Good Laboratory Practices while using this product. Avoid contact with skin, eyes, and clothing. Immediately change contaminated clothing.
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 only required when vapors are generated.
	Control of environmental exposure	Do not let product enter drains. Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and Chemical Properties

Appearance	Clear to light yellow liquid
Odor	Pungent
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	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 Incompatible with strong oxidizing agents, metals

SECTION 11: Toxicological Information

11.1 Toxicity

Acute toxicity

Symptoms if ingested	Severe burns of the mouth and throat as well as danger of perforation of the esophagus and the stomach
Symptoms if inhaled	Mucosal irritation, cough, shortness of breath, possible damage of the respiratory tract
Skin irritation	Mixture causes burns
Serious eye damage or irritation	Mixture causes serious eye damage. Risk of blindness
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	May cause respiratory irritation
	Aspiration hazard	No data available

SECTION 12: Ecological Information

12.1	**Toxicity**	No data available
12.2	**Persistence and degradability**	No data available
12.3	**Bioaccumulation potential**	No data available
12.4	**Mobility in Soil**	No data available
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**	UN Number: 1789 Class: 8 Packing Group: 2
14.2	**IMDG**	UN Number: 1789 Class: 8 Packing Group: 2
14.3	**IATA**	UN Number: 1789 Class: 8 Packing Group: 2

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: 4-22-22

1.1 Product Identification

Product Name:	GT10 Reagent 2
Product Number:	GT10
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

Corrosive to metals (category 1), skin corrosion (category 1A), serious eye damage (category 1), short term acute aquatic hazard (category 3)

2.2 GHS Label or Precautionary Statements

May be corrosive to metals, causes severe skin burns and eye damage, harmful to aquatic life

2.3 Hazards not otherwise classified:

None

3.1 Substances: Reagent 2 (20mL)

Sodium Hydroxide	Met. Corr. 1; Skin Corr. 1A; Eye Dam. 1; Aquatic Acute 3; H290, H314, H318, H402

4.1 Description of first aid measures

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water/in a shower. Take off all contaminated clothing immediately. Call a physician immediately.

In case of eye contact

Flush eyes with plenty of water. Remove contact lenses. Immediately call in an ophthalmologist.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water (2 glasses at most). Avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralize.

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 extinguishing measures appropriate to circumstances and the environment
5.2	**Special hazards**	Sodium oxides, not combustible, ambient fire may liberate hazardous vapors.

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.
6.3	**Methods for containment and clean up**	Wipe with liquid-absorbent and neutralizing material and dispose of in suitable container. Cover drains

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product. Immediately change contaminated clothing
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed. Recommended storage temperature is 4°C. No aluminum, tin or zinc containers. No metal containers

SECTION 8: Exposure Controls/Personal Protection

8.1	**OSHA Permissible Exposure Limits**	
	Sodium Hydroxide	Value: C Control Parameters: 2mg/m3

8.2	**Exposure controls**	Follow standard Good Laboratory Practices while using this product. Immediately change contaminated clothing.
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 only required when vapors are generated
	Control of environmental exposure	Do not let product enter drains

SECTION 9: Physical and Chemical Properties

Appearance	Colorless liquid
Odor	No data available
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	Not applicable
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**	No data available
10.3	**Possibility of hazardous reactions**	Risk of ignition or formation of flammable gases or vapors with metals and light metals. Violent reactions possible with ammonium compounds, cyanides, organic nitro compounds, organic combustible substances, phenols, powdered alkaline earth metals, acids, nitriles, magnesium Possible formation of hydrogen

SECTION 11: Toxicological Information

11.1 Toxicity

Acute toxicity

Symptoms if ingested	Severe burns of the mouth and throat as well as danger of perforation of the esophagus and the stomach
Symptoms if inhaled	Mucosal irritations, cough, shortness of breath, possible damage of the respiratory tract.
Skin irritation	Necrosis mixture causes severe burns
Serious eye damage or irritation	Mixture causes serious eye damage. Risk of blindness. Necrosis
Respiratory or skin sensitization	No data available
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**	Methods for determining the biological degradability are not applicable to inorganic substances
12.3	**Bioaccumulation potential**	No data available
12.4	**Mobility in Soil**	No data available
12.5	**Other adverse effects**	Harmful effect due to PH shift. Death of fish possible. Does not cause biological oxygen deficit. Neutralization possible in waster water treatment plants. Discharge into the environment must be avoided.

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**	UN Number: 1824 Class: 8 Packing Group: II
14.2	**IMDG**	UN Number: 1824 Class: 8 Packing Group: II
14.3	**IATA**	UN Number: 1824 Class: 8 Packing Group: II

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: 4-22-22

1.1 Product Identification

Product Name:	GT10 Buffer
Product Number:	GT10
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

Acute toxicity inhalation (category 4), eye irritation (category 2A), reproductive toxicity (category 2), specific target organ toxicity-repeated exposure inhalation (category 2), skin irritation (category 2)

2.2 GHS Label or Precautionary Statements

Causes serious eye irritation, harmful if inhaled, suspected of damaging fertility or the unborn child, may cause damage to organs (respiratory tract) through prolonged or repeated exposure if inhaled, causes skin irritation

2.3 Hazards not otherwise classified

None

3.1 Substances Buffer (100mL)

Lubrol N, N-bis (2- (bis (carboxymethyl) amino) ethyl) glycine	Skin Irrit. 2: H315 Acute Tox. 4; Eye Irrit. 2A; Repr. 2: STOT RE 2; H332, H319, H361, H373

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration and if necessary oxygen. Call a physician.

In case of skin contact

Wash off with soap and plenty of water. Immediately remove all contaminated clothing. Consult a doctor.

In case of eye contact

Flush eyes with plenty of water. Remove contact lenses. Call in an ophthalmologist

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water (2 glasses at most). Consult a physician.

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 foam carbon dioxide dry powder
5.2	**Special hazards**	Oxides of phosphorus, potassium oxides, carbon oxides, nitrogen oxides, ambient fire may liberate hazardous vapors

SECTION 6: Accidental Release Measures

6.1	**Personal precautions and personal protective equipment**	Standard laboratory personal protective equipment should be utilized. Avoid breathing vapor or mist
6.2	**Environmental precautions**	Don't let product enter drains, sewers, surface water or ground water
6.3	**Methods for containment and clean up**	Wipe with absorbent material and dispose of in suitable container. Cover drains.

SECTION 7: Handling and Storage

7.1	**Precautions for safe handling**	Follow standard Good Laboratory Practices while using this product. Change any contaminated clothing
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**	Contains no substances with occupational exposure limits
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 the product enter drains, sewer systems, or drainage systems

SECTION 9: Physical and Chemical Properties

Appearance	Clear Liquid
Odor	Odorless/slight
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**	Violent reactions possible with strong oxidizing agents, strong acids, strong bases. Avoid strong heating

SECTION 11: Toxicological Information

11.1 Toxicity

Acute toxicity	No data available
Skin irritation	May cause irritation to the skin and mucus membranes
Serious eye damage or irritation	May cause serious eye damage
Respiratory or skin sensitization	No data available
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	Suspected of damaging the. Unborn child. Suspected of damaging fertility
Specific target organ toxicity	May cause damage to organs through prolonged or repeated exposure- respiratory tract

	Aspiration hazard	No data available

SECTION 12: Ecological Information

12.1	**Toxicity**	Toxicity to fish, algae, bacteria, daphnia, and other aquatic invertebrates
12.2	**Persistence and degradability**	No data available
12.3	**Bioaccumulation potential**	No data available
12.4	**Mobility in Soil**	No data available
12.5	**Other adverse effects**	Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies. Discharge into the environment must be avoided.

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: 4-26-22