



ZYMO RESEARCH
The Beauty of Science is to Make Things Simple

Material Safety Data Sheet

Zymo Research advises each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (1) notify its employees, agents, contractors and others whom it knows or believes will use this material or the information in this MSDS and any other information regarding hazards or safety; (2) furnish this same information to each of its customers for the product; and (3) request its customers to notify their employees, customers, and other users of the product of this information.

Section 1 – Product and Company Information

Reagent/Buffer Name: ZymoTaq™ DNA Polymerase
Catalog Number: E2001, E2002

Company: Zymo Research Corp.
Street Address: 17062 Murphy Ave.
City, State, Zip Code, Country: Irvine, CA 92614 US
Phone: 949-679-1190
Fax: 949-266-9452

Section 2 – Ingredient Information/Composition

Description: Mixture of the substances listed below with non-hazardous additions.

Dangerous Components Name	CAS #	Percent
None	N/A	N/A

According to the OSHR 29 CFR§1910_1200, a mixture that contains less than one percent by weight or volume of a non-carcinogenic hazardous component is not considered hazardous unless there is evidence to the contrary. However, we recommend the use of gloves, lab coats and eye protection when working with these or any chemical reagents.

Section 3 – Hazard Identification

Precautionary Statements: R 36/37/38: Irritating to eyes, respiratory system and skin.

Target Organs: Kidneys

Section 4 – First Aid Measures

In case of

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact: In case of contact, immediately wash with soap and water and rinse thoroughly.

Inhalation: If inhaled, remove to fresh air. If irritation persists get medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Wash mouth out with water provided the person is conscious Get medical attention immediately.

Section 5 – Fire Fighting Measures

Fire Fighting Media and Instructions:	Water spray, CO ₂ or dry chemical powder. Larger Fire: Use water spray or alcohol resistant foam.
Unusual Fire Hazard:	Emits toxic fumes when on fire.
Fire Fighting Protective Measures:	Wear protective clothing to prevent contact with the skin and eyes. Wear self-contained breathing equipment to prevent inhalation of explosive or combustion gasses.

Section 6 – Accidental Release Measures

Procedure(s) Of Personal Precaution(s) :	Ensure ventilation is adequate. Wear rubber gloves.
Methods For Cleaning Up:	Absorb with sand or liquid-binding material. Ventilate area. Place in closed containers for disposal.
Environmental Precautions:	Do not allow to enter the surface or ground water. Do not allow to enter sewers.

Section 7 – Handling and Storage

Handling:	No special measures are required.
Storage:	Store at -20°C.

Section 8 – Exposure Controls / Personal Protection

General Protective Measures:	Avoid contact with eyes and skin. Do not place in mouth. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.
Personal Protection Equipment:	Safety goggles. Lab coat. Gloves. Special respiratory protection is not required.

Ingredients with Limit Values:	<table border="1"><thead><tr><th>Chemical Name</th><th>CAS No.</th><th>OEL</th></tr></thead><tbody><tr><td>Glycerol</td><td>56-81-5</td><td>10mg/m³</td></tr></tbody></table>	Chemical Name	CAS No.	OEL	Glycerol	56-81-5	10mg/m ³
Chemical Name	CAS No.	OEL					
Glycerol	56-81-5	10mg/m ³					

Section 9 – Physical and Chemical Properties

Physical State And Appearance:	Fluid
Odor:	Odorless
Color:	Colorless
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Auto Igniting:	Not self-igniting
Ignition Temperature:	400°C
Danger of Explosion:	Product does not present an explosion hazard.
Density:	N/A
Solubility In Water:	Fully soluble

Section 10 – Stability and Reactivity

Stability:	Product is stable under normal handling and storage conditions. Avoid excess heat, flame and pressure.
Thermal Decomposition/ Conditions To Avoid:	No decomposition if used according to specifications.
Hazardous/Dangerous Decomposition Products:	No dangerous decomposition products known. Avoid contact with strong oxidizing agents, acids and alkali.

Section 11 – Toxicological Information

Primary Irritant Effects:	R36/37/38: Irritating to eyes, respiratory system and skin.
Sensitization Effects:	Via prolonged exposure, a sensitizing effect through inhalation is possible. Via prolonged exposure, a sensitizing effect on the skin is possible.
Additional Toxicological Information:	This product has no known carcinogenic properties. This product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations, as issued in the latest version.

Section 12 – Ecological Information

Water Hazard:	Water Hazard class I (self-assessment): slightly hazardous for water. Do not allow product to come into contact with surface or ground water, and do not allow it to reach the sewage system.
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Section 13 – Disposal Considerations

Dispose according to official regulations. Do not dispose with household garbage. Do not allow product to reach sewage system.

Section 14 – Transport Considerations

Land Transport:	Product does not belong to a hazard class of any international agreements on the transport and packaging of dangerous goods.
Maritime Transport:	Not a marine pollutant.
Air Transport:	Product does not belong to any hazard classification.

Section 15 – Regulatory Information

This product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials. General safety regulations should always be observed when handling chemicals.

Section 16 – Other Information

The above information is believed to be correct, but does not purport to be all-inclusive and should be used only as a guide. Zymo Research shall not be held liable for any damage or other consequences resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Zymo Research be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Zymo Research has been advised or the possibility of such damages. All materials supplied by Zymo Research Corp are intended to be used by trained professionals and are for research use only.



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Section 1 – Product and Company Information

Reagent/Buffer Name: 2X Reaction Buffer
Company: Zymo Research Corp.
Street Address: 17062 Murphy Ave.
City, State, Zip Code, Country: Irvine, CA 92614 US
Phone: 949-679-1190
Fax: 949-266-9452

Section 2 – Ingredient Information/Composition

Description: Mixture of the substances listed below with non-hazardous additions.

Dangerous Components Name	CAS #	Percent
N/A	N/A	N/A

Section 3 – Hazard Identification

Precautionary Statements: R 36/37/38: Irritating to eyes, respiratory system and skin.

Section 4 – First Aid Measures

In case of
Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact: Immediately wash with soap and water and rinse thoroughly.
Inhalation: If inhaled, remove to fresh air. If irritation persists get medical attention immediately.
Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Wash mouth out with water provided the person is conscious Get medical attention immediately.

Section 5 – Fire Fighting Measures

Fire Fighting Media and Instructions:	Water spray, CO ₂ or dry chemical powder. Larger Fire: Use water spray or alcohol resistant foam.
Unusual Fire Hazard:	Emits toxic fumes when on fire.
Fire Fighting Protective Measures:	Wear protective clothing to prevent contact with the skin and eyes. Wear self-contained breathing equipment to prevent inhalation of explosive or combustion gasses.

Section 6 – Accidental Release Measures

Procedure(s) Of Personal Precaution(s) :	Ensure ventilation is adequate. Wear rubber gloves.
Methods For Cleaning Up:	Absorb with sand or liquid-binding material. Ventilate area. Place in closed containers for disposal.
Environmental Precautions:	Do not allow to enter the surface or ground water. Do not allow to enter sewers.

Section 7 – Handling and Storage

Handling:	No special measures are required.
Storage:	Store at -20°C.

Section 8 – Exposure Controls / Personal Protection

General Protective Measures:	Avoid contact with eyes and skin. Do not place in mouth. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.
Personal Protection Equipment:	Safety goggles. Lab coat. Gloves. Special respiratory protection is not required.

Section 9 – Physical and Chemical Properties

Physical State And Appearance:	Fluid
Odor:	Odorless
Color:	Colorless
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Auto Igniting:	Product is not self-igniting
Ignition Temperature:	400°C
Danger of Explosion:	Product does not present an explosion hazard.
Density:	N/A
Solubility In Water:	Fully soluble

Section 10 – Stability and Reactivity

Stability:	Product is stable under normal handling and storage conditions. Avoid excess heat, flame and pressure.
Thermal Decomposition/ Conditions To Avoid:	No decomposition if used according to specifications.
Hazardous/Dangerous Decomposition Products:	No dangerous decomposition products known. Avoid contact with strong oxidizing agents, acids and alkali.

Section 11 – Toxicological Information

Primary Irritant Effects:	R36/37/38: Irritating to eyes, respiratory system and skin.
Sensitization Effects:	Via prolonged exposure, a sensitizing effect through inhalation is possible. Via prolonged exposure, a sensitizing effect on the skin is possible.
Additional Toxicological Information:	This product has no known carcinogenic properties. This product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations, as issued in the latest version.

Section 12 – Ecological Information

Water Hazard:	Water Hazard class I (self-assessment): slightly hazardous for water. Do not allow product to come into contact with surface or ground water, and do not allow it to reach the sewage system.
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Section 13 – Disposal Considerations

Dispose according to official regulations. Do not dispose with household garbage. Do not allow product to reach sewage system.

Section 14 – Transport Considerations

Land Transport:	Product does not belong to a hazard class of any international agreements on the transport and packaging of dangerous goods.
Maritime Transport:	Not a marine pollutant.
Air Transport:	Product does not belong to any hazard classification.

Section 15 – Regulatory Information

This product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials. General safety regulations should always be observed when handling chemicals.

Section 16 – Other Information

The above information is believed to be correct, but does not purport to be all-inclusive and should be used only as a guide. Zymo Research shall not be held liable for any damage or other consequences resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Zymo Research be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Zymo Research has been advised or the possibility of such damages. All materials supplied by Zymo Research Corp are intended to be used by trained professionals and are for research use only.



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Section 1 – Product and Company Information

Reagent/Buffer Name: dNTP Mix

Company: Zymo Research Corp.
Street Address: 17062 Murphy Ave.
City, State, Zip Code, Country: Irvine, CA 92614 US
Phone: 949-679-1190
Fax: 949-266-9452

Section 2 – Ingredient Information/Composition

Description: Mixture of the substances listed below with non-hazardous additions.

Dangerous Components Name	CAS #	Percent
N/A	N/A	N/A

Section 3 – Hazard Identification

Precautionary Statements: R 36/37/38: Irritating to eyes, respiratory system and skin.

Section 4 – First Aid Measures

In case of

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact: Immediately wash with soap and water and rinse thoroughly.

Inhalation: If inhaled, remove to fresh air. If irritation persists get medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Wash mouth out with water provided the person is conscious Get medical attention immediately.

Section 5 – Fire Fighting Measures

Fire Fighting Media and Instructions:	Water spray, CO ₂ or dry chemical powder. Larger Fire: Use water spray or alcohol resistant foam.
Unusual Fire Hazard:	Emits toxic fumes when on fire.
Fire Fighting Protective Measures:	Wear protective clothing to prevent contact with the skin and eyes. Wear self-contained breathing equipment to prevent inhalation of explosive or combustion gasses.

Section 6 – Accidental Release Measures

Procedure(s) Of Personal Precaution(s) :	Ensure ventilation is adequate. Wear rubber gloves.
Methods For Cleaning Up:	Absorb with sand or liquid-binding material. Ventilate area. Place in closed containers for disposal.
Environmental Precautions:	Do not allow to enter the surface or ground water. Do not allow to enter sewers.

Section 7 – Handling and Storage

Handling:	No special measures are required.
Storage:	Store at -20°C.

Section 8 – Exposure Controls / Personal Protection

General Protective Measures:	Avoid contact with eyes and skin. Do not place in mouth. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.
Personal Protection Equipment:	Safety goggles. Lab coat. Gloves. Special respiratory protection is not required.

Section 9 – Physical and Chemical Properties

Physical State And Appearance:	Fluid
Odor:	Odorless
Color:	Colorless
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Auto Igniting:	Product is not self-igniting
Ignition Temperature:	400°C
Danger of Explosion:	Product does not present an explosion hazard.
Density:	N/A
Solubility In Water:	Fully soluble

Section 10 – Stability and Reactivity

Stability:	Product is stable under normal handling and storage conditions. Avoid excess heat, flame and pressure.
Thermal Decomposition/ Conditions To Avoid:	No decomposition if used according to specifications.
Hazardous/Dangerous Decomposition Products:	No dangerous decomposition products known. Avoid contact with strong oxidizing agents, acids and alkali.

Section 11 – Toxicological Information

Primary Irritant Effects:	R36/37/38: Irritating to eyes, respiratory system and skin.
Sensitization Effects:	Via prolonged exposure, a sensitizing effect through inhalation is possible. Via prolonged exposure, a sensitizing effect on the skin is possible.
Additional Toxicological Information:	This product has no known carcinogenic properties. This product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations, as issued in the latest version.

Section 12 – Ecological Information

Water Hazard:	Water Hazard class I (self-assessment): slightly hazardous for water. Do not allow product to come into contact with surface or ground water, and do not allow it to reach the sewage system.
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Section 13 – Disposal Considerations

Dispose according to official regulations. Do not dispose with household garbage. Do not allow product to reach sewage system.

Section 14 – Transport Considerations

Land Transport:	Product does not belong to a hazard class of any international agreements on the transport and packaging of dangerous goods.
Maritime Transport:	Not a marine pollutant.
Air Transport:	Product does not belong to any hazard classification.

Section 15 – Regulatory Information

This product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials. General safety regulations should always be observed when handling chemicals.

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Section 1 – Product and Company Information

Reagent/Buffer Name: DNase/RNase Free Water
Catalog Number: W1001-1, W1001-4, W1001-6, W1001-10

Company: Zymo Research Corp.
Street Address: 17062 Murphy Ave.
City, State, Zip Code, Country: Irvine, CA 92614 US
Phone: 949-679-1190
Fax: 949-266-9452

Section 2 – Ingredient Information/Composition

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

Dangerous Components Name	CAS #	Formula	Concentration
N/A	N/A	N/A	N/A

According to the OSHR 29 CFR§1910_1200, a mixture that contains less than one percent by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider this product to be hazardous; however we recommend the use of gloves, lab coats and eye protection when working with these or any chemical reagents.

Section 3 – Hazard Identification

Not applicable.

Section 4 – First Aid Measures

In Case of
Eye Contact: Not applicable.
Skin Contact: Not applicable.
Ingestion: Not applicable.
Inhalation: Not applicable.

Section 5 – Fire Fighting Measures

Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures:	No special measures required.

Section 6 – Accidental Release Measures

Non-hazardous material. Clean up of spills requires no special equipment or procedures.

Section 7 – Handling and Storage

Handling:	No special requirements.
Storage:	No special requirements.

Section 8 – Exposure Controls / Personal Protection

No special precautions required.

Section 9 – Physical and Chemical Properties

Physical States / Form:	Liquid
Color:	Colorless
Boiling Point:	100°C (212°F)
Melting Point:	0°C (32°F)
Solubility In Water:	Soluble

Section 10 – Stability and Reactivity

Stability:	Stable
Substances To Be Avoided:	None
Hazardous, Combustion, Or Decomposition Products:	None

Section 11 – Toxicological Information

Acute Effects	
Inhalation:	N/A
Eye Contact:	N/A
Skin Contact:	N/A
Ingestion:	N/A
Prolonged Exposure:	N/A
Chronic Effects:	N/A

Section 12 – Ecological Information

No information available.

Section 13 – Disposal Considerations

If material becomes contaminated during use, dispose of accordingly. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14 – Transport Considerations

No information available.

Section 15 – Regulatory Information

No information available.

Section 16 – Other Information

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