SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2026
Date Updated: January 5, 2026

SECTION 1. - - - - - - - - - PRODUCT AND COMPANY IDENTIFICATION- - - - - - - - - -

Product Name	SP6 RNA Polymerase (5000U)
Product Code(s)	9K-005-0003
Recommended Use	For Laboratory Research Use Only Not for Human or Animal Drug Use
Supplier	Bio Basic Inc.
Address	20 Konrad Crescent, Markham, Ontario, Canada, L3R 8T4
Telephone	(905) 474 4493
Fax	(905) 474 5794
For Chemical Emergency Phone#	(416) 995 9730

SECTION 2. - - - - - - - - - - HAZARDS IDENTIFICATION - - - - - - - - -

Classification of the substance or mixture

Not a hazardous substance or material.

GHS Label elements, including precautionary statements

Not a hazardous substance or material.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - -

Component	CAS-No	EC-No	Weight %
Glycerol	56-81-5	200-289-5	≤ 50
RNA polymerase	9014-24-8	N/A	≤ 0.1

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. - - - - - - - - - - FIRST-AID MEASURES- - - - - - - - - -

If inhaled
If breathed in, move person into fresh air. Consult doctor if feeling unwell.

In case of skin contact
Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact
Flush eyes with plenty of water. Remove contact lenses.

If swallowed
Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Notes to physician
The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. - - - - - - - - - -FIREFIGHTING MEASURES- - - - - - - - - -

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

Hazardous combustion products
Carbon oxides, metal oxides, gaseous hydrogen chloride (HCl).

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. - - - - - - - - - -ACCIDENTAL RELEASE MEASURES- - - - - - - - -

Personal precautions
For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

Reference to other sections
For disposal see section 13.

SECTION 7. - - - - - - - - - -HANDLING AND STORAGE- - - - - - - - -

Precautions for safe handling
For precautions see section 2.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
Recommended storage temperature: see product label

Specific end use(s)
Apart from the uses mentioned in section 1, no other specific uses are stipulated.

SECTION 8. - - - - - - - - - -EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - - - - -

Control parameters

Ingredients with workplace control parameters

Component	CAS-No	Value	Control parameters	Basis
Glycerol	56-81-5	TWA (Mist)	10 mg/m^3	CA BC OEL
		TWA (Respirable mist)	3 mg/m^3	CA BC OEL
		TWA (Mist)	10 mg/m^3	CA AB OEL
		TWAEV (Mist)	10 mg/m^3	CA QC OEL

Exposure controls

Appropriate engineering controls
Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Skin protection

Protective gloves. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the material safety data sheet and provided by us and for the application specified by us. 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, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Respiratory protection

No personal respiratory protective equipment normally required.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Body protection

Protective suit.

Control of environmental exposure

Do not let product enter drains.

SECTION 9. - - - - - - - - - -PHYSICAL AND CHEMICAL PROPERTIES- - - - - - - - - -

Appearance

Form	Liquid
Colour	Colourless

Safety data

Odour	Odourless
Odour Threshold	No data available
pH	ca. 7.9 (4°C)
Melting point/freezing point	No data available
Boiling point/range	No data available
Flash point	Does not flash
Evaporation rate	No data available
Flammability (liquids)	This product is not flammable; does not sustain combustion
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Density	1.14 g/cm^3
Relative density	No data available
Water solubility	Completely miscible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Explosive properties	Not explosive
Oxidizing properties	Not classified as oxidizing

SECTION 10. - - - - - - - - - -STABILITY AND REACTIVITY- - - - - - - - - -

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical stability
The product is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use. Stable under recommended storage conditions. No hazards to be specially mentioned.

Conditions to avoid
No data available

Incompatible materials
Strong oxidizing agents

Hazardous decomposition products
In the event of fire: see section 5.

SECTION 11. - - - - - - - - - -TOXICOLOGICAL INFORMATION- - - - - - - - - -

Mixture
Acute toxicity
Oral: Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Components
Glycerol
Acute toxicity
Acute oral toxicity: LC50 (Mouse): 11,500 mg/kg

Acute inhalation toxicity: LC50 (Rat, male): 275000 mg/m3
Exposure time: 7 h
Test atmosphere: vapor
GLP: no
Assessment: The component/mixture is minimally toxic after short term inhalation.
Acute dermal toxicity: LD50 (Guinea pig, male and female): 56,750 mg/kg
GLP: no

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation - 24 h
GLP: no

Serious eye damage/eye irritation
Eyes - Rabbit
Result: No eye irritation - 7 Days
GLP: no

Respiratory or skin sensitization
Assessment: Mild eye irritant, Mild respiratory irritant, No skin irritation

Germ cell mutagenicity
Test Type: Microbial mutagenesis assay (Ames test)
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
GLP: No information available.

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: No information available.

Carcinogenicity
Species: Rat, male and female
Application Route: Oral
Exposure time: 2 Years
GLP: No information available.
Remarks: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
Effects on fertility:
Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 2000 mg/kg bw/day
Fertility: NOAEL: 2,000 mg/kg body weight
GLP: no

Effects on fetal development:
Species: Rabbit, female
Application Route: Oral
Dose: 11.8, 54.8, 254.5, 1180 mg/kg bw/day
Duration of Single Treatment: 29 d
Developmental Toxicity: NOAEL: 1,180 mg/kg bw/day
GLP: no

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

RNA polymerase

Acute toxicity
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Expert judgment
Acute inhalation toxicity: Acute toxicity estimate: > 30 mg/l
Test atmosphere: dust/mist
Method: Expert judgment
Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Expert judgment

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard
No data available

Additional information
Health injuries are not known or expected under normal use.

SECTION 12. - - - - - - - - - -ECOLOGICAL INFORMATION- - - - - - - - - -

Toxicity
Mixture
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Endocrine disrupting properties
No data available

Other adverse effects
No data available

Components
Glycerol

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) -54,000 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) -1,955 mg/l - 48 h GLP: no
Toxicity to algae/aquatic plants	static test - Scenedesmus quadricauda (Green algae): > 10,000 mg/l - 8 d, GLP: no
Toxicity to microorganisms	static test EC50 - (Pseudomonas putida): > 10,000 mg/l - 16 h GLP: No information available

RNA polymerase

Toxicity to fish	LC50 : > 100 mg/l Exposure time: 96 h

SECTION 13. - - - - - - - - - -DISPOSAL CONSIDERATIONS- - - - - - - - - -

Product
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14. - - - - - - - - - -TRANSPORT INFORMATION- - - - - - - - - -

TDG
Not regulated as a dangerous good

IMDG
Not dangerous goods

IATA
Not dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

Further information
Not classified as dangerous in the meaning of transport regulations.

SECTION 15. - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - -

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16. - - - - - - - - - - OTHER INFORMATION- - - - - - - - - - -

Further information: no limited for paper copy, just for internal uses.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS