

Material Safety Data Sheet

Revision Date: 20-July-2022



Product and Company Information

Product Name	<i>TransZol</i>
Cat. No.	ET101-01
Company	TransGen Biotech Co., Ltd.
Technical Phone	+86-400-898-0321
Fax	+86-10-57815011
E-mail Address	trans@transgen.com.cn

The following TransGen products are included:

TransZol

RNA dissolving solution

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1. Product and Company Information

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2. Hazards Identification

GHS-Classification
Signal word: Danger



Health hazard

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation toxicity - Dusts and Mists	Category 2
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Specific target organ systemic toxicity (repeated exposure)	Category 2
Mutagenicity	Mutagenic Category 2

Hazard statements: H330 - Fatal if inhaled
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H341 - Suspected of causing genetic defects
H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P284 - Wear respiratory protection

P271 - Use only outdoors or in a well-ventilated area

P260 - Do not breathe dust or mist

P264 - Wash hands thoroughly after handling

P273 - Avoid release to the environment

EUH032 - Contact with acids liberates very toxic gas.

Potential health effects

Eyes Causes burns. Risk of serious damage to eyes. Corrosive to the eyes and may cause severe damage including blindness.

Skin Toxic in contact with skin. Causes burns. Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes. Possible risks of irreversible effects.

Inhalation Toxic by inhalation. Causes burns.

Ingestion Toxic if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

3. Composition

Chemical Name	CAS-No	Weight %
Phenol	108-95-2	30-60
Thiocyanic acid, compound with guanidine (1:1)	593-84-0	15-40
Ammonium thiocyanate	1762-95-4	7-13

We recommend handling all chemicals with caution.

4. First Aid Measures

General advice In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Move to fresh air.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Notes to physician	Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.
Environmental precautions	Prevent further leakage or spillage if safe to do so.

7. Handling and Storage

Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Protect from light.

8. Exposure Controls/Personal Protection

Exposure limits:

Chemical Name	OSHA PEL (TWA)	OSHA PEL (STEL)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Phenol	2 ppm 7.8 mg/m ³	none	none	none

9. Physical and Chemical Properties

General Information

Form: liquid

Water solubility: soluble

Others: No information available.

10. Stability and Reactivity

Stability	Stable under normal conditions
Materials to avoid	Strong oxidizing agents. Strong acids. Isocyanates. Heat Nitriles, Nitrides. Alkaline earth metals. Strong oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.
Polymerization	None under normal processing.

11. Toxicological Information

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Phenol	317 mg/kg (Rat)	no data available	316 mg/m ³ (Rat)
Thiocyanic acid, compound with guanidine (1:1)	571 mg/kg	2000 mg/kg	5.319 mg/l (4hrs)
Ammonium thiocyanate	500 mg/kg (Rat)	no data available	no data available

Principle Routes of Exposure/
Potential Health effects

Eyes	Causes burns Risk of serious damage to eyes Corrosive to the eyes and may cause severe damage including blindness.
Skin	Toxic in contact with skin. Causes burns. Components of the product may be absorbed into the body through the skin Irritating to skin and mucous membranes. Possible risks of irreversible effects
Inhalation	Toxic by inhalation. Causes burns.
Ingestion	Toxic if swallowed Ingestion causes burns of the upper digestive and respiratory tracts. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

12. Ecological Information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	No information available.
Bioaccumulation	No information available.

13. Disposal Considerations

Dispose of in accordance with local regulations.

14. Transport Information

IATA

Proper shipping name Corrosive liquid, n.o.s. (guanidine thiocyanate-phenol solution)

Hazard class 8

Subsidiary Class No information available

Packing group II

UN-No UN1760

15. Regulatory Information

International Inventories	Complies
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16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Safety Data Sheet

Material Safety Data Sheet

Revision Date: 20-July-2022



1. Product and Company Information

Product Name	RNA dissolving solution
Cat. No.	GQ101-01
Company	TransGen Biotech Co., Ltd.
Technical Phone	+86-400-898-0321
Fax	+86-10-57815011
E-mail Address	trans@transgen.com.cn

2. Hazards Identification

Not hazardous

3. Composition

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First Aid Measures

General advice	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Move to fresh air.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure.
Notes to physician	Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.
Environmental precautions	Prevent further leakage or spillage if safe to do so.

7. Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage	Keep in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection

Exposure limits: We are not aware of any national exposure limit.

9. Physical and Chemical Properties

General Information

Form:	Liquid
Water solubility:	Soluble
Others:	No information available.

10. Stability and Reactivity

Stability	Stable under normal conditions
Materials to avoid	no data available
Hazardous decomposition	no data available

11. Toxicological Information

Acute toxicity - No information available.

Principle Routes of Exposure/ Potential

Health effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Carcinogenic effects	No information available.
Mutagenic effects	No information available.
Reproductive toxicity	No information available.
Sensitization	No information available.

12. Ecological Information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	No information available.
Bioaccumulation	No information available.

13. Disposal Considerations

Dispose of in accordance with local regulations.

14. Transport Information

IATA	Not dangerous goods
Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard class	none
Subsidiary Class	none
Packing group	none
UN-No	none

15. Regulatory Information

16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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End of Safety Data Sheet