Reviewed on 2008/09/29

1. Product and Con	npany Information				
Product Name : T4 DNA LigASE					
Product Number : E-3061					
Company : Bioneer					
Address : BIONEER CORPORATION					
49-3, Munpyee	ong-dong, Daedeok-gu, Daej	eon 306-220, Korea			
Technical Phon	e: +82-042-930-8523				
2. Composition/Info	ormation on Ingredient				
Hazardous/Non-haza	ardous Components	Γ			
Chemical Name	CAS No.	EINECS No.	Weight %		
Glycerol	56-81-5		40~80		
3. Hazards Identific	cation.				
According to prese	ent data no classification and	labelling is required accordir	ng to Directives 67/548/EEC		
or 1999/45/EC					
Classification					
Indication of dan	ger				
Not hazardous	-				
4. First Aid Measur	res.				
Skin contact : Wa	ash off immediately with plent	ty of water			
Eye contact : Rins	se immediately with plenty of	water, also under the eyelid	s, for at least 15 minutes		
Ingestion : Never give anything by mouth to an unconscious person					
Inhalation : Move	to fresh air				
Notes to physicia	an: Treat symptomatically				
5. Fire Fighting Me	asures.				
Suitable extingui	shing media : Dry chemical				
Special protective	e equipment for firefighters	s.: Wear self-contained breat	hing apparatus and protective		
suit					

## 6. Accidental Release Measures

Personal precautions : Use personal protective equipment

Methods for cleaning up : Soak up with inert absorbent material

7. Handling / Storage

Handling : No special handling advice required

**Storage :** Keep in properly labelled containers

8. Exposure Controls / Personal Protection

Chemical Name	EU OEL(TWA)	EU OEL(STEL)	EU Skin Notation	Austria OEL(MAK)
Glycerol	-	-	-	-

Chemical Name	Belgium(TWA)	Denmark(TWA)	Finland OEL(TWA)	France OEL(VME)
Glycerol	-	-	-	-

Chemical Name	Germany OEL(TWA)	Ireland(TWA)	Italy OEL(TWA)
Glycerol	-	-	-

Chemical Name	Netherlands OEL(MAC)	Spain OEL(TWA)	United Kingdom
Glycerol	-	-	-

Engineering measures : Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment

Hand protection : Impervious gloves.

**Eye protection :** Safety glasses with side-shields

Skin and body protection : Lightweight protective clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls : Prevent product from entering drains..

General Informa	ation				
Form : Liquid	I				
Important Healt	h Safety and Envi	ronmental Information			
Boiling point/range °C No data available °F No data available					
Melting point/range °C No data available °F No data available					
Flash point °C No data available °F No data available					
Autoignition	temperature	°C No data available °F No data available			
Oxidizing pro	operties : No infor	mation available			
Water solubi	lity: No data avail	able			
0. Stability / Rea	octivity				
	e under normal con	ditions.			
-	oid : No information				
		cts : No information available			
	: Hazardous polym	nerisation does not occur			
	: Hazardous polym	erisation does not occur			
Polymerization		nerisation does not occur			
Polymerization		nerisation does not occur			
Polymerization 1. Toxicological Acute toxicity			LC50(inhalation, rat/mouse		
Polymerization 1. Toxicological Acute toxicity themical Name	Information		LC50(inhalation, rat/mouse 570mg/m3(rat)		
Polymerization 1. Toxicological Acute toxicity hemical Name	Information LD50(oral, rat/mou 12600mg/kg(rat)	ıse) LD50(dermal, rat/rabbit)			
Polymerization 1. Toxicological Acute toxicity themical Name slycerol	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/	ıse) LD50(dermal, rat/rabbit)			
Polymerization 1. Toxicological Acute toxicity themical Name slycerol Principle Routes Potential Health	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/	use) LD50(dermal, rat/rabbit) 10g/kg(rabbit)			
Polymerization 1. Toxicological Acute toxicity Chemical Name Slycerol Principle Routes Potential Health Eyes : No infe	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/ a effects	use) LD50(dermal, rat/rabbit) 10g/kg(rabbit)			
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Polymerization 1. Toxicological Acute toxicity hemical Name lycerol Principle Routes Potential Health Eyes : No info Skin : No info Inhalation : N Ingestion : N Specific effects	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/ a effects ormation available. formation available. No information available.	use) LD50(dermal, rat/rabbit) 10g/kg(rabbit) ilable able			
Polymerization 1. Toxicological Acute toxicity hemical Name ilycerol Principle Routes Potential Health Eyes : No info Skin : No info Inhalation : N Ingestion : N Specific effects Carcinogenia	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/ a effects ormation available. bormation available. No information avail lo information avail	Ise) LD50(dermal, rat/rabbit) 10g/kg(rabbit) ilable able			
Polymerization 1. Toxicological Acute toxicity Chemical Name Blycerol Principle Routes Potential Health Eyes : No info Skin : No info Inhalation : N Ingestion : N Specific effects Carcinogenic Mutagenic eff	Information LD50(oral, rat/mou 12600mg/kg(rat) s of Exposure/ a effects ormation available. No information available. No information available.	Ise) LD50(dermal, rat/rabbit) 10g/kg(rabbit) ilable able rmation available			
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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

#### ΙΑΤΑ

Proper shipping name : Not classified as dangerous in the meaning of transport regulations

Hazard Class : No information available

Subsidiary Class : No information available

Packing group : No information available

UN-No : No information available

## 15. Regulatory Information

## Korea regulatory information

None of the ingredients listed.

# In accordance with local and national regulations According to present data no classification and labelling isrequired according to Directives 67/548/EEC or 1999/45/EC.

### Indication of danger

Not Hazardous

# R -phrase(s)

No information available

S -phrase(s)

### **International Inventories**

Chemical Name	EINECS	ELINCS	PICCS	ENCS
Glycerol	Listed		Listed	Listed

Chemical Name	TSCA	CHINA	AICS	KECL
Glycerol	Listed	Listed	Listed	Listed

# 16. Other Information

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features. BIONEER is not held liable for any damage resulting from handing or from contact with the above products.