Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name
• TexTac

Product Description
• White liquid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Adhesive

1.3 Details of the supplier of the safety data sheet

Manufacturer • IKONICS Corporation

4832 Grand Ave. Duluth, MN 55807 United States www.ikonics.com sds@ikonics.com

Telephone (General) • (218) 628-2217

Telephone (General) • (800) 328-4261 - Toll free

1.4 Emergency telephone number

Chemtrec • 1-800-424-9300 - Within USA and Canada

• +1 703-527-3887 - Outside USA and Canada (collect calls accepted)

Section 2: Hazards Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Not classified

2.2 Label Elements

CLP

Precautionary statements

Prevention • P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional, national,

and/or international regulations.

DSD/DPD

2.3 Other Hazards

CLPNo data availableDSD/DPDNo data available

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

UN GHS

Not classified

2.2 Label elements

UN GHS

Precautionary statements

Prevention • P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional, national,

and/or international regulations.

2.3 Other hazards

UN GHS

No data available

United States (US) According to OSHA GHS

2.1 Classification of the substance or mixture

OSHA HCS 2012

Not classified

2.2 Label elements

OSHA HCS 2012

Precautionary statements

Prevention • Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312

IF ON SKIN: Wash with plenty of soap and water. - P302+P352

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. - P305+P351+P338

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

OSHA HCS 2012

• No data available

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS • Not classified

2.2 Label elements

WHMIS

· Not classified

2.3 Other hazards

WHMIS

• No data available

2.4 Other information



See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

	Hazardous Components									
Chemical Name	Identifiers	%(weight) LD50/LC50		Classifications According to Regulation/Directive	Comments					
1,2-Propanediol	CAS:57-55-6 EC Number:200- 338-0 EINECS:200- 338-0	1% TO 5%	Ingestion/Oral-Rat LD50 · 20 g/kg Skin-Rabbit LD50 · 20800 mg/kg	WHMIS: UN GHS:Eye Irrit. 2A; Skin Irrit. 3 EU DSD/DPD:R36 EU CLP: OSHA HCS 2012:						
Poly(oxy-1,2-ethanediyl), .alpha (nonylphenyl)omegahydroxy-, branched	CAS :68412-54-4	1% TO 5%		WHMIS: UN GHS: EU DSD/DPD: EU CLP: OSHA HCS 2012:						

European Chemicals Agency - Candidate List of Substances of Very High Concern for Authorization

• Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched, CAS #68412-54-4; (4-Nonylphenol, branched and linear, ethoxylated); listed 2013/06/20; 1-5%.

Key to abbreviations

= See Section 16 for full text of R and S phrases.

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

• IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration and call 911 or emergency medical service.

Skin

• IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye

• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

• If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse

mouth. Never give anything by mouth to an unconscious person. If large quantities are swallowed, call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

• Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Antidotes No data available

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing • SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

Media

LARGE FIRE: Water spray, fog or regular foam.

Unsuitable

No data available

Extinguishing Media

Firefighting Procedures • Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

Keep unauthorized personnel away.

Ventilate closed spaces before entering. LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Some of these materials may burn, but most do not ignite readily.

Hazardous Combustion • Products of combustion include: carbon oxides (COx).

Products

5.3 Advice for firefighters

 Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

• Do not touch or walk through spilled material. Ventilate enclosed areas.

Emergency Procedures

 No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

6.2 Environmental precautions

• LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up **Measures**

• Use appropriate Personal Protective Equipment (PPE)

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in

suitable container.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

• Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage

 Store away from extreme heat. Do not freeze. Keep container closed when not in use.

7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

	Exposure Limits/Guidelines								
	Result	Australia	Canada Ontario	Ireland	New Zealand	Norway			
1,2-Propanediol (57-55-6)	TWAs	150 ppm TWA (total vapor and particulates); 474 mg/m3 TWA (total vapor and particulates); 10 mg/m3 TWA (particulates only)	10 mg/m3 TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present, aerosol only); 50 ppm TWA (aerosol and vapor); 155 mg/m3 TWA (aerosol and vapor)	150 ppm TWA (total vapor and particulates); 470 mg/m3 TWA (total vapor and particulates); 10 mg/m3 TWA (particulate)	150 ppm TWA (particulates and vapor); 474 mg/m3 TWA (particulates and vapor); 10 mg/m3 TWA (particulates only)	25 ppm TWA; 79 mg/m3 TWA			
	Exposure Limits/Guidelines (Con't.)								
	Result South Africa								
1,2-Propanediol (57-55-6)			TWAs	150 ppm TWA (particulate and vapor); 470 mg/m3 TWA (particulate and vapor); 10 mg/m3 TWA (particulate)					

8.2 Exposure controls

Engineering Measures/Controls

• Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

Personal Protective Equipment Pictograms





Respiratory

Eye/Face

Hands

Skin/Body

General Industrial Hygiene

Considerations

Environmental Exposure Controls

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Wear protective gloves rubber or neoprene.
- Wear protective clothing apron or other impervious body coverings.
- Handle in accordance with good industrial hygiene and safety practice.
- No data available

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Not relevant
Color	White	Odor	Slight acrylic odor
Taste	Not relevant	Particulate Type	No data available

Particulate Size	No data available	Aerosol Type	No data available
Odor Threshold	No data available	Physical and Chemical Properties	Not relevant
General Properties			
Boiling Point	100 C(212 F)	Melting Point	0 C(32 F)
Decomposition Temperature	No data available	Heat of Decomposition	No data available
рН	4.3	Specific Gravity/Relative Density	1.03 Water=1
Density	No data available	Bulk Density	No data available
Water Solubility	Dispersible	Solvent Solubility	No data available
Viscosity	No data available	Explosive Properties	Not relevant
Oxidizing Properties:	Not relevant		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	No data available
VOC (Vol.)	No data available	Volatiles (Wt.)	38.5 %
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	> 200 F(> 93.3333 C)	UEL	No data available
LEL	No data available	Autoignition	Not relevant
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion (ΔHc)	No data available
Burning Time	No data available	Flame Duration	No data available
Flame Height	No data available	Flame Extension	No data available
Ignition Distance	No data available	Flammability (solid, gas)	Not relevant
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

9.2 Other Information

• No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

• No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

• Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

• Hazardous polymerization will not occur.

10.4 Conditions to avoid

• Avoid freezing. Excess heat.

10.5 Incompatible materials

• No data available

10.6 Hazardous decomposition products

• No decomposition is expected under normal storage and use conditions. Hazardous

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data	
1,2-Propanediol (1% TO 5%)	57-55-6	Acute Toxicity: orl-rat LD50:20 gm/kg; skn-rbt LD50:20800 mg/kg; Irritation: eye-rbt 500 mg/24H MLD; skn-hmn 500 mg/7D MLD	
GHS Properties	Classification	on	
Acute toxicity	EU/CLP• UN GHS• OSHA HCS	s 2012•	
Skin corrosion/Irritation	EU/CLP• UN GHS• OSHA HCS	s 2012•	
Serious eye damage/Irritation	EU/CLP• UN GHS• OSHA HCS	5 2012 •	
Skin sensitization	EU/CLP• UN GHS• OSHA HCS	5 2012 •	
Respiratory sensitization	EU/CLP• UN GHS• OSHA HCS	5 2012 •	
Aspiration Hazard	EU/CLP• UN GHS• OSHA HCS	S 2012•	
Carcinogenicity	EU/CLP• UN GHS• OSHA HCS	5 2012•	
Germ Cell Mutagenicity	EU/CLP• UN GHS• OSHA HCS	5 2012 •	
Toxicity for Reproduction	EU/CLP• UN GHS• OSHA HCS	5 2012 •	
STOT-SE	EU/CLP• UN GHS• OSHA HCS	\$ 2012•	
STOT-RE	EU/CLP• UN GHS• OSHA HCS	5 2012•	

Potential Health Effects

Inhalation

Acute (Immediate)

• May cause mild irritation.

Chronic (Delayed)

• Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate)

• May cause mild irritation.

Chronic (Delayed)

• Repeated and prolonged exposure may cause irritation.

Eye

Acute (Immediate)

• May cause irritation.

Chronic (Delayed)

• Repeated and prolonged exposure may cause irritation.

Ingestion

Acute (Immediate)

• No data available

Chronic (Delayed)

• No data available

Mutagenic Effects
 No known significant effects or critical hazards.
 Carcinogenic Effects
 No known significant effects or critical hazards.

Reproductive Effects• No known significant effects or critical hazards.

Section 12 - Ecological Information

12.1 Toxicity

Component	nt CAS Data		Comments
1,2-Propanediol (1% TO 5%)	l h /-hh-h	Crustacea: 48 Hour(s) EC50 Water Flea 1000 mg/L; Fish: 96 Hour(s) LC50 Fish 710 mg/L [Fresh water]	

12.2 Persistence and degradability

• No data available

12.3 Bioaccumulative potential

• No data available

12.4 Mobility in Soil

• No data available

12.5 Results of PBT and vPvB assessment

• No data available

12.6 Other adverse effects

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

13.2 Other Information

• Dispose of wastes in an approved waste disposal facility.

Section 14 - Transport Information

	14.1 UN number			14.4 Packing group	14.5 Environmental hazards	
DOT	NDA	NDA	NDA	NDA	NDA	
TDG	NDA	NDA	NDA	NDA	NDA	
IMO/IMDG	NDA	NDA	NDA	NDA	NDA	
ADN	NDA	NDA	NDA	NDA	NDA	

ADR/RID	NDA	NDA	NDA	NDA	NDA	
IATA/ICAO	NDA	NDA	NDA	NDA	NDA	

14.6 Special precautions for user

• None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

14.8 Other information

DOT • Not regulated.

TDG • Not regulated.

IMO/IMDG • Not regulated.

ADN • Not regulated.

ADR/RID • Not regulated.

IATA/ICAO • Not regulated.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • No data available

	State Right To Know								
Component	CAS	NJ	PA						
1,2-Propanediol	57-55-6	Yes	Yes						
Poly(oxy-1,2- ethanediyl), .alpha (nonylphenyl)- .omegahydroxy-, branched	68412-54- 4	No	No						

						Inventory	1				
Component	(CAS	Au	stralia AICS	Cana	da DSL	China		EU EINECS		Japan ENCS
1,2-Propanediol	57-5	55-6	Yes		Yes		Yes		Yes		Yes
Poly(oxy-1,2- ethanediyl), .alpha (nonylphenyl)- .omegahydroxy-, branched	684 4	12-54-	Yes		Yes		Yes		No		Yes
					Inve	entory (Co	n't.)				
Component		CAS	3	Korea KI	ECL	New	Zealand	Phili	ppines PICCS		TSCA
1,2-Propanediol	,	57-55-6		Yes		Yes		Yes		Yes	3
Poly(oxy-1,2- ethanediyl), .alpha. (nonylphenyl)- .omegahydroxy-, branched		68412-54	1-4	Yes		Yes		Yes		Yes	3

Australia

Labor

Australia - High Volume Industrial Chemicals List

•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

●1,2-Propanediol 57-55-6 1% TO 5%

Australia - List of Designated Hazardous Substances - Classification

• Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.- 68412-54-4 1% TO 5% Not Listed

hydroxy-, branched

•1,2-Propanediol

57-55-6

1% TO 5% Self classification required (particulates only or total vapor and particulates)

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-Uncontrolled product according to WHMIS 68412-54-4 1% TO 5%

hydroxy-, branched classification criteria

Uncontrolled product according to WHMIS •1.2-Propanediol 57-55-6 1% TO 5% classification criteria

Canada - WHMIS - Ingredient Disclosure List

•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

•1,2-Propanediol 57-55-6 1% TO 5% 1 %

Environment

Canada - Council of Ministers of the Environment - Water Quality Guidelines for Freshwater Aquatic Life

●Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

•1,2-Propanediol 57-55-6 1% TO 5% 500000 µg/L (listed under Glycols)

Europe

Other

EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances

• Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Group III Chemical

•1,2-Propanediol 57-55-6 1% TO 5% Not Listed

EU - Existing Substance Regulation (793/93/EEC) - Evaluation of Existing HPV Chemicals (REPEALED)

● Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

•1,2-Propanediol 57-55-6 1% TO 5%

EU - Export and Import Restrictions (689/2008) - Chemicals Qualifying for PIC Notification

68412-54-4~ 1% TO 5% Banned as a pesticide; Severe restriction as an industrial chemical • Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-

hydroxy-, branched

•1,2-Propanediol 57-55-6 1% TO 5% Not Listed

EU - Export and Import Restrictions (689/2008) - Chemicals Subject to Export Notification Procedure

Poly(oxy-1,2-ethanediyl), .alpha.-Severe restriction as an industrial chemical for professional use; Banned as

(nonylphenyl)-.omega.-hydroxy-, 68412-54-4 1% TO 5% a pesticide in the group of plant protection products; Banned as other

branched pesticide including biocides 57-55-6 1% TO 5% Not Listed

•1,2-Propanediol EU - No-Longer Polymers List (67/548/EEC)

68412-54-4 1% TO 5% NLP No. 500-209-1 (>1<2.5 mol ethoxylated units) • Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-,

branched

•1,2-Propanediol 57-55-6 1% TO 5% Not Listed

Germany

Environment

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, 68412-54-4 1% TO 5% Not Listed branched

1% TO 5% $\frac{\text{ID Number 280, hazard class 1 - low hazard to}}{\text{waters}}$ 57-55-6

•1,2-Propanediol

Japan

Environment

Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

•1.2-Propanediol 57-55-6 1% TO 5% 2-(8)-321: 2-(8)-323

Other

Japan - Chemical Substance Control Law (CSCL) - Examined Existing Chemical Substances

● Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

1.2-Propanediol 57-55-6 1% TO 5% Decomposable

Japan - Fire Service Law - Hazardous Materials

•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-68412-54-4 1% TO 5% Not Listed hydroxy-, branched

1% TO 5% Group 4 - Flammable liquids III (listed under 3rd Class 57-55-6 •1,2-Propanediol petroleums - soluble)

Japan - Japanese Pharmacopoeia Listing - Synthetics

• Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched 68412-54-4 1% TO 5% Not Listed

•1,2-Propanediol 57-55-6 1% TO 5%

15.2 Chemical Safety Assessment

Section 16 - Other Information

Relevant Phrases (code & full text)

• P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

R36 - Irritating to eyes.

Classification method

for mixtures

Liability

Calculation method.

Last Revision Date Preparation Date

• 13 June 2012

Other Information

• 23 October 2013

• Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142. Disclaimer/Statement of • The information contained herein is based on data available to us and is believed to be

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