SAFETY DATA SHEETS

This SDS packet was issued with item:

072675023

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

072679082

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

072679058 072679074 072679876



SAFETY DATA SHEET

Issuing Date 22-May-2015 Revision Date 22-May-2015 ECR# 23572

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Tenure Adhesive Part A

Other means of identification

UN-Number UN1993

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Dental bonding agent

Uses advised against No information available

Supplier's details

Supplier Address

DenMat

1017 W. Central Ave. Lompoc, CA 93436 TEL: 805-346-3700

Emergency telephone number

Emergency Telephone

Number

805-346-3700

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger Hazard Statements

Signal Word

Hazard Statements

- · Causes serious eye irritation
- May cause drowsiness or dizziness
- Highly flammable liquid and vapor.

Page 1/9



Appearance Clear to light yellow

Physical State Liquid.

Odor Aromatic solvent/acetone

Precautionary Statements

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep cool

General Advice

None

Eves

• ÎF 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

Skin

• IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

- If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell

Fire

• In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

Disposal

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Aspiration hazard if swallowed - can enter lungs and cause damage Harmful to aquatic life

<5% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Acetone	67-64-1	85 - 95	*
NTG-GMA Salt	133736-31-9	3-5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult a physician.

Skin Contact Wash off with warm water and soap. Consult a physician if necessary.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing If not

breathing, give artificial respiration. Seek immediate medical attention/advice.

Ingestion Do NOT induce vomiting. Aspiration hazard if swallowed - can enter lungs and cause damage.

Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Dizziness. Drowsiness.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Condition of the patient should be carefully monitored. Aspiration of this product during

induced emesis can result in lung injury. If evacuation of stomach contents is considered necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation.

Contact a Poison Control Center for additional treatment information.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None. Yes.

Protective Equipment and Precautions for Firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Avoid breathing vapors or mists. Remove all sources of

ignition. Take precautionary measures against static discharges. Do not get in eyes, on

skin, or on clothing. Wash thoroughly after handling.

Environmental Precautions

Environmental Precautions

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Avoid breathing vapors. Keep away from open flames, hot

surfaces and sources of ignition. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Wear personal protective equipment. Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

ACGIH TLV	OSHA PEL	NIOSH IDLH
STEL: 750 ppm	TWA: 1000 ppm	IDLH: 2500 ppm 10% LEL
TWA: 500 ppm	TWA: 2400 mg/m ³	TWA: 250 ppm
	(vacated) TWA: 750 ppm	TWA: 590 mg/m ³
	(vacated) TWA: 1800 mg/m ³	
	(vacated) STEL: 2400 mg/m ³	
	The acetone STEL does not	
	apply to the cellulose acetate	
	fiber industry. It is in effect for all	
	other sectors	
	(vacated) STEL: 1000 ppm	
N/D	N/D	N/D
	STEL: 750 ppm TWA: 500 ppm	STEL: 750 ppm TWA: 1000 ppm TWA: 2400 mg/m³ (vacated) TWA: 1800 mg/m³ (vacated) STEL: 2400 mg/m³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection Safety glasses with side-shields. Tightly fitting safety goggles.

Long sleeved clothing. Impervious gloves.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceClear to light yellow.OdorAromatic solvent/acetoneOdor ThresholdNo information available

Property Values Remarks/ - Method

pН No Data Available None known Melting Point/Range Boiling Not determined None known Point/Boiling Range 55-60 °C None known **Flash Point** -17 °C For acetone **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known

Flammability Limits in Air

upper flammability limitNo data availablelower flammability limitNo data available

Vapor Pressure184 mm HgNone knownVapor Density2.0None knownSpecific Gravity0.7 - 0.8 @ 25°CNone knownWater SolubilitySolubleNone knownSolubility in other solvents100% soluble in acetone and ethanolNone known

Information on basic physical and chemical properties

Partition coefficient: n-octanol/waterNo data availableNone knownAutoignition TemperatureNo data availableNone knownDecomposition TemperatureNo data availableNone knownViscositySimilar to waterNone known

Flammable Properties Not flammable

Explosive Properties No data available Oxidizing Properties No data available

Other information

VOC Content (%) 90%

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Ignitions sources - heat, sparks and open flames.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The product itself has not been tested. Data is for major component in product. Inhalation

May cause drowsiness and dizziness based on components. May cause irritation of

respiratory tract.

Eve Contact Irritating to eyes.

Skin Contact May cause skin irritation and/or dermatitis.

Ingestion Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical

pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause drowsiness and dizziness. Eye contact with liquid may cause irritation including

stinging, burning, tearing, or reddening of the eyes.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available. **Mutagenic Effects** No information available.

Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed and

abused as an alcoholic beverage.

Reproductive Toxicity No information available. STOT - single exposure No information available. STOT - repeated exposure No information available. **Target Organ Effects** Eyes. Respiratory system.

Aspiration Hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

Numerical measures of toxicity - Product

Acute Toxicity <5% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 7200 mg/kg; Acute toxicity estimate Inhalation

dust/mist 1520.7 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Acetone 67- 64-1		LC50 96 h: 4.74 - 6.33 mL/L (Oncorhynchus mykiss) LC50 96 h: 6210 – 8120 mg/L static (Pimephales promelas) LC50 96 h: = 8300 mg/L (Lepomis macrochirus)	EC50 = 14500 mg/L 15 min	EC50 48 h: 10294 - 17704 mg/L Static (Daphnia magna) EC50 48 h: 12600 - 12700 mg/L (Daphnia magna)
Sodium NTG-GMA 133736-31-9		N/A	N/A	N/A

Persistence and Degradability No information available. Bioaccumulation No information available.

Chemical Name	Log Pow	
Acetone	-0.24	

Other Adverse Effects

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone - 67-64-1		Included in waste stream:		U002
		F039		

14. TRANSPORT INFORMATION

DOT

UN-Number UN1993

Proper shipping name Flammable liquids, n.o.s.

Hazard Class Packing Group

Description UN1993, Flammable liquids, n.o.s. (Acetone), 3, II

Emergency Response Guide 128

Number

TDG

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3 Packing Group II

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

MEX

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3 Packing Group II

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

<u>IATA</u>

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group II
ERG Code 3H

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

IMDG/IMO

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3 Packing Group II

EmS No. F-E, S-E

Description UN1993, Flammable liquid, n.o.s. (Acetone, Ethyl alcohol), 3, II, (-20°C c.c.)

15. REGULATORY INFORMATION

International Inventories

TSCA

All components of this product are either listed or are exempt on the TSCA inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardYesFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Acetone	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Acetone	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION				
NFPA	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards -
HMIS_	Health Hazard 2*	Flammability 3	Physical Hazard 0	Personal Protection X

Issuing Date 22 May, 2015 **Revision Date** 22 May, 2015

General 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 Safety Data Sheet



SAFETY DATA SHEET

Issuing Date 22-May-2015 Revision Date 22-May-2015 ECR# 23572

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Tenure Adhesive, Part B

Other means of identification

UN-Number UN1993

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Dental bonding agent

Uses advised against No information available

Supplier's details

Supplier Address

DenMat

1017 W. Central Ave. Lompoc, CA 93436 TEL: 805-346-3700

Emergency telephone number

Emergency Telephone

Number

805-346-3700

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger Hazard Statements

iazara otaternents

Signal Word Hazard Statements

- Causes serious eye irritation
- May cause drowsiness or dizziness
- Highly flammable liquid and vapor.

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Appearance Clear to light yellow

Physical State Liquid.

Odor Aromatic solvent/acetone

Precautionary Statements

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep cool

General Advice

None

Eves

• ÎF 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

Skin

• IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

- If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell

Fire

• In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

Disposal

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Aspiration hazard if swallowed - can enter lungs and cause damage Harmful to aquatic life

<5% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Acetone	67-64-1	80-90	*
Bis[2-[(2-methyl-1-oxoallyl)oxy]ethyl] dihydrogen benzene-1,2,4,5-tetracarboxylate	51156-91-3	10-15	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult a physician.

Skin Contact Wash off with warm water and soap. Consult a physician if necessary.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing If not

breathing, give artificial respiration. Seek immediate medical attention/advice.

Ingestion Do NOT induce vomiting. Aspiration hazard if swallowed - can enter lungs and cause damage.

Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Dizziness. Drowsiness.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Condition of the patient should be carefully monitored. Aspiration of this product during

induced emesis can result in lung injury. If evacuation of stomach contents is considered necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation.

Contact a Poison Control Center for additional treatment information.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None. Yes.

Protective Equipment and Precautions for Firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Avoid breathing vapors or mists. Remove all sources of

ignition. Take precautionary measures against static discharges. Do not get in eyes, on

skin, or on clothing. Wash thoroughly after handling.

Environmental Precautions

Revision Date 22-May-2015 **Tenure Adhesive Part B**

Environmental Precautions

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Avoid breathing vapors. Keep away from open flames, hot

surfaces and sources of ignition. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Wear personal protective equipment. Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone	STEL: 750 ppm	TWA: 1000 ppm	IDLH: 2500 ppm 10% LEL
67-64-1	TWA: 500 ppm	TWA: 2400 mg/m ³	TWA: 250 ppm
		(vacated) TWA: 750 ppm	TWA: 590 mg/m ³
		(vacated) TWA: 1800 mg/m ³	
		(vacated) STEL: 2400 mg/m ³	
		The acetone STEL does not	
		apply to the cellulose acetate	
		fiber industry. It is in effect for all	
		other sectors	
		(vacated) STEL: 1000 ppm	
Bis[2-[(2-methyl-1-oxoallyl)oxy]ethyl]	N/D	N/D	N/D
dihydrogen benzene-1,2,4,5-			
tetracarboxylate			
51156-91-3			

Appropriate engineering controls

Engineering Measures Showers Eyewash

stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection

Safety glasses with side-shields. Tightly fitting safety goggles.

Long sleeved clothing. Impervious gloves.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in

accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Remove and wash

contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceClear to light yellow.OdorAromatic solvent/acetoneOdor ThresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks/ - Method</u>

pН Not determined None known Melting Point/Range Boiling None known Not determined Point/Boiling Range 55 - 60 °C None known **Flash Point** -17 ° C For acetone **Evaporation rate** No data available None known None known No data available

Flammability (solid, gas)
Flammability Limits in Air

upper flammability limitNo data availablelower flammability limitNo data availableapor PressureNo data available

Vapor PressureNo data availableNone knownVapor DensityNo data availableNone knownSpecific Gravity0.7 - 0.8 @ 25°CNone knownWater SolubilitysolubleNone knownSolubility in other solvents100% soluble in acetone and ethanolNone known

Information on basic physical and chemical properties

Partition coefficient: n-octanol/water No data availableNone knownAutoignition TemperatureNo data availableNone knownDecomposition TemperatureNo data availableNone knownViscositySimilar to waterNone known

Flammable Properties Not flammable

Explosive PropertiesNo data availableOxidizing PropertiesNo data available

Other information

VOC Content (%) 82%

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Ignitions sources - heat, sparks and open flames.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

Revision Date 22-May-2015 **Tenure Adhesive Part B**

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The product itself has not been tested. Data is for major component in product. Inhalation

May cause drowsiness and dizziness based on components. May cause irritation of

respiratory tract.

Eye Contact Irritating to eyes.

Skin Contact May cause skin irritation and/or dermatitis.

Ingestion Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical

pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause drowsiness and dizziness. Eye contact with liquid may cause irritation including

stinging, burning, tearing, or reddening of the eyes.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available. **Mutagenic Effects** No information available.

Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed and

abused as an alcoholic beverage.

Reproductive Toxicity No information available. STOT - single exposure No information available. STOT - repeated exposure No information available. **Target Organ Effects** Eyes. Respiratory system.

Aspiration Hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

Numerical measures of toxicity - Product

<5% of the mixture consists of ingredient(s) of unknown toxicity. **Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 7200 mg/kg; Acute toxicity estimate Inhalation

dust/mist 1520.7 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to	Toxicity to Fish	Toxicity to	Daphnia Magna (Water Flea)
	Algae		Microorganisms	
Acetone 67-		LC50 96 h: 4.74 - 6.33 mL/L	EC50 = 14500 mg/L 15 min	EC50 48 h: 10294 - 17704
64-1		(Oncorhynchus mykiss) LC50 96 h:		mg/L Static (Daphnia magna) EC50
		6210 – 8120 mg/L static (Pimephales		48 h: 12600 -
		promelas) LC50 96 h: = 8300 mg/L		12700 mg/L (Daphnia
		(Lepomis macrochirus)		magna)

Persistence and Degradability No information available. **Bioaccumulation** No information available.

Chemical Name	Log Pow
Acetone	-0.24

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone - 67-64-1		Included in waste stream:		U002
		F039		

14. TRANSPORT INFORMATION

DOT

UN-Number UN1993

Proper shipping name Flammable liquids, n.o.s.

Hazard Class 3
Packing Group II

Description UN1993, Flammable liquids, n.o.s. (Acetone), 3, II

Emergency Response Guide 128

Number

TDG

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class
Packing Group

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

MEX

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3 Packing Group II

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

IATA

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group II
ERG Code 3H

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

IMDG/IMO

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group ||

EmS No. F-E, S-E

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II, (-20°C c.c.)

15. REGULATORY INFORMATION

International Inventories

TSCA All components of this product are either listed or are exempt on the TSCA inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardYesFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Acetone	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Acetone	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards -	
<u>HMIS</u>	Health Hazard 2*	Flammability 3	Physical Hazard 0	Personal Protection X	

Revision Date 22-May-2015 **Tenure Adhesive Part B**

Revision Date

22-May-2015

<u>General Disclaimer</u>
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 Safety Data Sheet



SAFETY DATA SHEET

Issuing Date 29 May-2015 **Revision Date** 29 May-2015 **ECR#** 23583

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Tenure Quik with Fluoride

Other means of identification

UN-Number UN1993

Synonyms None

Product Type Liquid

Recommended use of the chemical and restrictions on use

Recommended Use Professional dental bonding agent

Uses advised against No information available

Supplier's details

Supplier Address

DenMat

1017 W. Central Ave. Lompoc, CA 93436 TEL: 805-346-3700

Emergency telephone number

Emergency Telephone

805-346-3700

Classification

Number

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

Skin Sensitizer	Category 1B
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word : Warning

Hazard Statements

Hazard Statements

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation

Precautionary Statements

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- P261 Avoid breathing vapors.
- P264 Wash hands and forearms thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear eye protection, protective gloves.
- 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.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P501 Dispose of contents/container according to local, regional, national, and international regulations.





Appearance Clear/pale yellow

Physical State Liquid Odor slight ester/sweet smell

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep container tightly closed.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep cool

General Advice

None

Eyes

- 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

Skin

• IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

- If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell

Fire

• In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

· Store locked up.

Disposal

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Aspiration hazard if swallowed - can enter lungs and cause damage Harmful to aquatic life

<5% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
ethoxylated bisphenol-a-dimethacrylate	56744-60-6	10 - 20	*
triethylene glycol dimethacrylate	109-16-0	10 – 20	*
2-hydroxyethyl methacrylate	868-77-9	10 - 20	*
Acetone	67-64-1	40 - 50	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult a physician.

Skin Contact Wash off with warm water and soap. Consult a physician if necessary.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If feeling

unwell, seek medical attention.

Ingestion Rinse oral cavity with copious water. If feeling unwell, call a physician or Poison Control Center

immediately.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Mild skin irritation

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Not Applicable

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

None

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Avoid breathing vapors or mists.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

Environmental Precautions

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Avoid breathing vapors. Wear personal protective equipment.

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before

re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and away from direct sunlight.

Incompatible Products Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits None Established

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Skin and Body Protection

Safety glasses with side-shields. Tightly fitting safety goggles.

Long sleeved clothing. Impervious gloves.

Respiratory ProtectionIf exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone	STEL: 750 ppm	TWA: 1000 ppm	IDLH: 2500 ppm 10% LEL
67-64-1	TWA: 500 ppm	TWA: 2400 mg/m ³	TWA: 250 ppm
		(vacated) TWA: 750 ppm	TWA: 590 mg/m ³
		(vacated) TWA: 1800 mg/m ³	
		(vacated) STEL: 2400 mg/m ³	
		The acetone STEL does not	
		apply to the cellulose acetate	
		fiber industry. It is in effect for all	
		other sectors	
		(vacated) STEL: 1000 ppm	

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Remove and wash

contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid (paste) Appearance Various colors

Odor Minimal; Ester/sweet Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks/ - Method</u>

pH Not Applicable
Melting Point/Range Boiling Not Applicable

Boiling Point >56° C

Evaporation rate Not Applicable Flammability (solid, gas) Not Applicable

Flammability Limits in Air

upper flammability limitNo data availablelower flammability limitNo data available

Vapor Pressure 282 Vapor Density 2

Specific Gravity 0.90 @ 25°C

Water Solubility Insoluble None known

Solubility in other solvents Soluble in acetone and ethanol

Information on basic physical and chemical properties

Partition coefficient: n-octanol/water
Autoignition Temperature
Decomposition Temperature
No data available
No data available
No data available

Viscosity liquid

Flammable Properties Flammable

Explosive Properties No data available Oxidizing Properties No data available

Other information

VOC Content (%) 50%

10. STABILITY AND REACTIVITY

None known

None known

None known

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal conditions.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Ignitions sources - heat, sparks and open flames.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The product itself has not been tested. Data is for major component in product. Inhalation

May cause drowsiness and dizziness based on components. May cause irritation of

respiratory tract.

Eye Contact Irritating to eyes.

Skin Contact May cause skin irritation and/or dermatitis.

Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical Ingestion

pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause drowsiness and dizziness. Eye contact with liquid may cause irritation including

stinging, burning, tearing, or reddening of the eyes.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available. **Mutagenic Effects** No information available. No information Available. Carcinogenicity

Acute Toxicity

Chemical Name	Result	Species	Dose
ethoxylated bis-phenol-A	LD 50 Oral	Rat	>2000 mg/kg
2-hydroxyethyl methacrylate	LD 50 Oral	Rat	5,564 mg/kg
triethylene glycol dimethacrylate	LD 50 Oral	Rat	10837 mg/kg

No information available. **Reproductive Toxicity** STOT - single exposure No information available. STOT - repeated exposure No information available. **Target Organ Effects** Respiratory system.

Aspiration Hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
ethoxylated bis- phenol-A dimethacrylate 41637-38-1	EC50 48h >100 mg/l OECD Guideline 201	LD50 96h >100 mg/l OECD Guideline 203	EC50 48h >100 mg/l OECD Guideline 202
2-hydroxyethyl methacrylate 868-77-9		Flow Through (Fathead Minnow) 227 mg/l - 96 h	
Triethylene glycol dimethacrylate 109-16-0	Not established	Not established	Not established

Tenure Quik with Fluoride Persistence and Degradability

No information available. Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

> CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone - 67-64-1		Included in waste stream:		U002
		F039		

14. TRANSPORT INFORMATION

DOT

DOT

UN1993 **UN-Number**

Proper shipping name Flammable liquids, n.o.s.

Hazard Class Packing Group

Description UN1993, Flammable liquids, n.o.s. (Acetone), 3, II

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Emergency Response Guide

Number

TDG

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group II

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

MEX

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group ||

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

IATA

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group II
ERG Code 3H

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II

IMDG/IMO

UN-Number UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3 Packing Group II

EmS No. F-E, S-E

Description UN1993, Flammable liquid, n.o.s. (Acetone), 3, II, (-20°C c.c.)

15. REGULATORY INFORMATION

International Inventories

TSCA

All components of this product are either listed or are exempt on the TSCA inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Acetone	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

None of the components are listed

U.S. State Right-to-Know Regulations

Massachusetts Acetone

New Jersey Acetone, 2-Hydroxyethyl methacrylate Pennsylvania Acetone, 2-Hydroxyethyl methacrylate

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Revision Date 29 -May -2015 Tenure Quik with Fluoride

16. OTHER INFORMATION						
<u>NFPA</u>	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards -		
<u>HMIS</u>	Health Hazard 1	Flammability 3	Physical Hazard 0	Personal Protection X		

Revision Date 29-May-2015

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End of Safety Data Sheet