

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

071771518

**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).**

273046701

**DENTSPLY/International  
DENTSPLY/Caulk  
Safety Data Sheet**

**1. Product and Company Identification**

Product Name <b>Lynal<sup>®</sup> Liquid</b>	SDS Code Number <b>553005-Liquid</b>
Trade Name & Synonyms <b>Lynal<sup>®</sup> Tissue Conditioner and Temporary Reliner</b>	Date of Last Revision <b>11/12/13</b>
Manufacturer <b>DENTSPLY/Caulk</b>	Address <b>38 West Clarke Avenue Milford DE 19963-1805 <a href="http://www.caulk.com">http://www.caulk.com</a>, <a href="http://www.dentsply.com">http://www.dentsply.com</a></b>
Grades or Minor Variant Identities Not Applicable	Information Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>
Product Use (for Canada) Not Applicable	Emergency Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>

**2. Hazard(s) Identification**



**Danger**

**Highly Flammable Liquid and Vapour**

- Keep away from heat/sparks/open flames / hot surfaces.
- No smoking.
- Keep container tightly closed.
- Wear protective gloves/eye protection/face protection.
- Ground / Bond container and receiving equipment.
- Use explosion-proof electrical lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- IF ON SKIN or Hair: Remove / take off immediately all contaminated clothing.
- Rinse skin with water / shower.
- In case of fire: Use CO<sub>2</sub> sand or extinguishing powder.

**3. Composition/Information on Ingredients**

<b>Hazardous Components</b>	<b>C.A.S. Number</b>	<b>Exposure Limits</b>	<b>%</b>
Ethyl Alcohol	64-17-5	1000 ppm	< 10
Triethyl citrate	77-93-0	Not Established	> 90

Note: Flavor additive is artificial mint.

**4. First Aid Measures**

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Rinse opened eye for several minutes under running water. If symptoms persist consult physician	Not Applicable	Not Applicable
Skin	Immediately wash with soap and water and rinse thoroughly	Not Applicable	Not Applicable
Inhalation	Supply fresh air	Not Applicable	Not Applicable
Ingestion	If symptoms persist consult physician	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable

Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.

**5. Fire and Explosion Data**

Flashpoint Method: 18°C (64°F) Pensky-Martens Closed Cup	Flammable (Explosive) Limits in Air LEL: Not Established UEL: Not Established	Autoignition Temperature: Not Established	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids): Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: 3	

Extinguishing Media: Dry chemical, alcohol foam, or carbon dioxide. Water may be ineffective, but should be used to keep fire-exposed containers cool.	Extinguishing Media to Avoid: Water with full jet.
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.	
Unusual Fire and Explosion Hazards: Formation of toxic gases is possible during heating or in case of fire.	

## 6. Accidental Release Measures

Containment Techniques: Wear proper personal protective equipment as described in section 8. Absorb spill with inert material (e.g. vermiculite, sand, earth), then place material in suitable labeled plastic or metal container.		
Spill/Leak Clean-up Procedures and Equipment: Absorb spill with inert material (e.g. vermiculite, sand, and earth), then place material in suitable labeled plastic or metal container. Ensure adequate ventilation.		
Evacuation Procedures: Not Applicable	Special Instructions: Not Applicable	Reporting Requirements: Not Applicable

## 7. Handling and Storage

Handling Practices and Warnings: Wash thoroughly after handling. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals. Avoid ingestion and inhalation.
Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store away from extreme heat, food and beverages.

## 8. Exposure Control / Personal Protection



Ventilation: None required during normal intended use of this product		Other Engineering Controls: Not Applicable
Routes of Entry	Personal Protective Equipment (PPE) for Normal Use	
Eye/Face	Safety Glasses	PPE for Emergencies
Skin	The glove material has to be impermeable and resistant to the product.	Not Applicable
Inhalation	Not Required for normal volumes used in Dental office.	Not Applicable
Body Protection	Protective work clothing	Not Applicable
General Hygiene Considerations and Work Practices: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.		
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable		
Other Protective Measures and Equipment: Not Applicable		

## 9. Physical and Chemical Characteristics

Appearance: Clear liquid.	Odor: Characteristic alcohol odor with mint.	
Normal Physical State: Low Viscosity Liquid	Melting Point: Not Established	Boiling Point: 109°C (228°F)
Specific Gravity: 1.1 g/cm <sup>3</sup>	Solubility in Water: Partially	pH: Not Applicable
Vapor Pressure (mm Hg): N. A.	Vapor Density (AIR=1): Not Established	Evaporation Rate (Butyl Acetate =1) Not Established
Other: Not Applicable		

## 10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): High temperatures, strong oxidizing agents and acetyl chloride.	
Hazardous Products Produced During Decomposition: Carbon dioxide, and carbon monoxide from incomplete combustion.	
Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur	Conditions to Avoid: High Temperatures, ignition sources.
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid: High Temperatures, ignition sources.

## 11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: The plasticizer has an Oral LD <sub>50</sub> of 7952 mg/Kg.					
Emergency Overview: Material may cause eye irritation. Breathing vapors may cause drowsiness and dizziness.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Material causes severe eye irritation.	Single	Moderate	Irritation and possible corneal damage	Yes
Skin	Material may be an irritant and may be absorbed through the skin.	Single & Repeated	Moderate	Irritation or possible allergic response. Severe allergic response may result in breathing difficulties.	Yes
Inhalation	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.	Repeated	Moderate	Chronic inhalation may cause effects similar to those of acute inhalation. Causes respiratory tract irritation. May cause motor incoordination and speech abnormalities.	Yes

Ingestion	May cause irritation of the digestive tract.	Single & Repeated	Mild	Not Applicable	No
Other Central nervous system	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure Open sores and wounds of the skin. Individuals with known sensitivity to methacrylate acrylates, or urethane dimethacrylate resin used in Dental restorative products.					
Carcinogenicity NTP?: Not listed IARC monographs?: Not listed OSHA regulated?: No. All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.					
Potential Environmental Effects Do not allow to enter sewers/ surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4) Health = 1, Fire = 3, Reactivity = 1 Specific Hazard = None					

## 12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard class2 (Self-assessment): The ethyl alcohol in the product is apt to volatilizes, leech into the ground water, but no data on the rates of these processes can be found. Its fate in ground water is unknown. When released into water it will volatilize and probably degrade. It would not be expected to adsorb to sediment or bioconcentrate in fish. When released to the atmosphere it will photodegrade in hours to an estimated range of 4 – 6 days in less polluted areas.

## 13. Disposal Considerations

Regulations: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations

Properties (Physical/Chemical) Affecting Disposal: Dispose of material as liquid waste in a closed container.  
RCRA P-Series: None Listed, RCRA U-Series: None Listed. Waste Number D001 (Ignitable Waste)

## 14. Transport Information

Regulated for Shipping: Yes	Proper Shipping Name: Ethyl Alcohol Solution	Packing Group: II
Do Changes in Quantities, packaging, or shipment method change product classification? No	Hazard Class: 3	UN Identification Number: 1170
Other: Not Applicable		



Flammable Liquid

## 15. Regulatory Information

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: No chemicals have a reportable quantity. Report spills required under federal, state and local regulations. Many states have more stringent release reporting requirements.
RCRA U-Series Hazardous Waste Code : Not Applicable
Section 313 Toxic Chemicals: This product does not contain any chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372).
SARA Codes: CAS# 64-17-5 Ethyl Alcohol: immediate, delayed, fire.
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.
Clean Air Act: CAS# 64-17-5 Ethyl Alcohol: is not listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 ozone depleters. This material does not contain any Class 2 depleters.
Clean Water Act: CAS# 64-17-5 Ethyl Alcohol: is not listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.
WGK (Water Danger /Protection): CAS# 64-17-5 Ethyl Alcohol: 0
International Regulations: Hazard Symbol: Flammable XI F Risk Phrases: R11 Highly Flammable, R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36/37/38 Irritating to eyes, respiratory system. R68 Possible risks of irreversible effects. Safety Phrases: S7/9 Keep container tightly closed and in a well ventilated place. S16 Keep away from sources of ignition – No Smoking. S23 Do not breathe fumes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37 Wear suitable protective clothing and gloves. S60 This material and its container must be disposed of as hazardous waste.
Canada WHMIS for the CAS# 64-17-5 Ethyl Alcohol, classification of B2 D2A, Flammable Liquid is on the Canadian Ingredient Disclosure List.

## 16. Other Information

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex.

All components are synthetically produced; none are derived from animal products.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

**DENTSPLY/International  
DENTSPLY/Caulk  
Safety Data Sheet**

**553005**

**1. Product and Company Identification**

Product Name <b>Lynal<sup>®</sup> Powder</b>	SDS Code Number <b>553005-Powder</b>
Trade Name & Synonyms <b>Lynal<sup>®</sup> Tissue Conditioner and Temporary Reliner</b>	Date of Last Revision <b>11/12/13</b>
Manufacturer <b>DENTSPLY/Caulk</b>	Address <b>38 West Clarke Avenue Milford DE 19963-1805 <a href="http://www.caulk.com">http://www.caulk.com</a>, <a href="http://www.dentsply.com">http://www.dentsply.com</a></b>
Grades or Minor Variant Identities Not Applicable	Information Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>
Product Use (for Canada) Not Applicable	Emergency Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>

**2. Hazard(s) Identification**

**Warning**

**Causes eye irritation**

**Causes mild skin irritation**

**Wash hands thoroughly after handling.**

**If In Eyes: Rinse cautiously with water for several minutes.**

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

**If skin irritation occurs: Get medical attention.**

**3. Composition/Information on Ingredients**

Hazardous Components	C.A.S. Number	Exposure Limits	%
Benzoyl Peroxide	94-36-0	5.0 mg/M <sup>3</sup>	< than 1

**Warning: Contains Aspartame: Practioner: Advise Phenylketonurics this product contains phenylalanine.**

**4. First Aid Measures**

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If symptoms persist consult physician	Get medical aid.	Not Applicable
Skin	Flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Wash clothing before reuse.	Get medical aid if symptoms persist.	Not Applicable
Inhalation	Move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Consult physician if symptoms persist	Get medical aid.	Not Applicable
Ingestion	If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.	Get medical aid.	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable

Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.

**5. Fire and Explosion Data**

Flashpoint Method: <b>304°C (572°F) Tag Closed Cup</b>	Flammable (Explosive) Limits in Air LEL: 20mg/M <sup>3</sup> (as dust cloud) UEL: Not Applicable	Autoignition Temperature: >300°C (570°F)	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids) Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: NFPA Flammability =1	
Extinguishing Media: Water spray, water foam, CO <sub>2</sub> , or extinguishing powder. Fight larger fires with water spray or alcohol resistant foam.		Extinguishing Media to Avoid: Water with full jet.	
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices. Formation of toxic, irritating gases is possible from the decomposition of the polymer.			
Unusual Fire and Explosion Hazards: Dusts may be combustible when exposed to heat, flame, or oxidizing agents. Although the polymer dust is not easily ignited, the explosive limits of the polymer dust suspended in air are approximately those of coal dust therefore, fire fighters should avoid extinguishing methods which generate dust clouds. Formation of toxic, irritating gases is possible from the decomposition of the polymer. In routine use this product does not present an explosion hazard.			

**6. Accidental Release Measures**

Containment Techniques: Material is a solid and as such containment is limited to steps to reduce dust.
Spill/Leak Clean-up Procedures and Equipment: Wear protective clothing and scoop up bulk material and place in a labeled plastic or metal container. Avoid gross skin contact to minimize the possibility of contact dermatitis to susceptible persons. Polymer particles are slippery when spilled on hard floor so

sweep immediately and wash area with water to avoid accidental falls. Keep exposure to airborne particles to a minimum when cleaning by using proper ventilation as discussed in section 8.

Evacuation Procedures: Not Applicable

Special Instructions: Not Applicable

Reporting Requirements: Not Applicable

## 7. Handling and Storage

Handling Practices and Warnings: Minimize dust generation when handling. Avoid inhalation of dust, and contact with eyes. Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals.

Storage Practices and Warnings: Store in a cool, dry, well ventilated area. Store only in the original package. Keep package tightly sealed. To prevent water absorption and contamination. Store away from food and beverages.

## 8. Exposure Control / Personal Protection



Ventilation: Use adequate general or local exhaust to keep airborne concentrations below the permissible exposure limits shown in section 2.

Other Engineering Controls: Not Applicable

Routes of Entry	Personal Protective Equipment (PPE) for Normal Use	PPE for Emergencies
Eye/Face	Wear appropriate protective eyeglasses or safety glasses to prevent exposure during normal use.	For emergency or higher risk of exposure, wear chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin	During normal use, disposable gloves are recommended to prevent skin exposure.	For emergency or higher risk of exposure, wear protective gloves to prevent skin exposure and wear a lab coat to prevent contamination of your clothing. Wash contaminated clothing before reuse.
Inhalation	During normal use with local exhaust, use of a dust mask will provide additional protection.	For emergency or higher risk of exposure, (for example when obvious dust cloud is observed), follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN149 approved respirator when necessary.
Body Protection	Protective work clothing	Not Applicable

General Hygiene Considerations and Work Practices: When using polymer particulate material, use methods to minimize dust generation. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.

Protective Measures During Repair and Maintenance of Contaminated Equipment: Wear protective gloves and OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN149 approved respirator to prevent inhalation of dust.

Other Protective Measures and Equipment: Facilities should be equipped with an eyewash station.

## 9. Physical and Chemical Characteristics

Appearance: White free flowing powder.

Odor: Characteristic methacrylate ester odor.

Normal Physical State: Dry powder (Polymer particles)

Melting Point: Not Applicable

Specific Gravity: 1.0 g/cm<sup>3</sup>

Solubility in Water: Not soluble

pH: Not Applicable

Vapor Pressure (mm Hg): Not Applicable

Vapor Density (AIR=1) Not Applicable

Evaporation Rate (Butyl Acetate =1) Not Applicable

Other: Decomposition Temperature 200°C (392°F)

## 10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): Strong Oxidizing agents, strong bases, amines and alkalis.

Hazardous Products Produced During Decomposition: Carbon monoxide, irritating gases and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization:  May Occur  May Not Occur

Conditions to Avoid: None known

Stability?  Stable  Unstable

Conditions to Avoid: Excess heat above 200°C (392°F), strong oxidants.

## 11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data:

Product may be an irritant to the skin in susceptible persons. On the eye the product has an irritating effect. Certain susceptible persons may be sensitized or allergic to acrylates and methacrylates.

Emergency Overview: Free flowing powder is not known to cause significant health problems. Should be considered an inert or nuisance dust. Avoid inhalation of dust. Keep dust out of eyes to prevent possible irritation.

Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Material can cause irritation and redness.	Single	Mild	Irritation and possible corneal damage.	Not Applicable
Skin	Material may cause irritation.	Single & Repeated. Irritation may become more pronounced after repeated exposure in some individuals.	Mild	Irritation or possible allergic response. Some individuals may become sensitized to powder after repeated doses and develop contact dermatitis.	Not Applicable
Inhalation	Material may cause irritation.	Single & Repeated. Irritation may become more pronounced after repeated	Not known to cause any health issues so anticipated response is	Some individuals may become sensitized to powder after repeated doses and develop contact dermatitis.	Not Applicable

		exposure in some individuals.	mild.		
Ingestion	Not a normal route of entry. May cause irritation of digestive tract.	Not a normal route of entry.	Not known to cause any health issues so anticipated response is mild.	Not a normal route of entry.	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure: Existing respiratory conditions may be aggravated by inhalation of powders. Individuals with known sensitivity to methacrylates, or acrylates used in Dental products.					
Carcinogenicity NTP?: Not listed IARC monographs?: Not listed OSHA regulated?: No All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.					
Potential Environmental Effects: Not considered hazardous to surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4), Health = 1, Fire = 1, Reactivity = 0					

## 12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Material is a solid with low volatility and is insoluble in water. Material is expected to have low toxicity to organisms in the environment. It is not biodegradable. Material is not likely to be removed during biological treatment process.

## 13. Disposal Considerations

Regulations: May be disposed of in landfill or incinerated. Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations.

Properties (Physical/Chemical) Affecting Disposal: Dry powder. Dispose of material as solid waste in a closed container.

## 14. Transport Information

Regulated for Shipping: No. Not Regulated	DOT Shipping Name: Not Regulated	Packing Group: Not Applicable
Do Changes in Quantities, packaging, or shipment method change product classification? No	DOT Hazard Class: Not Applicable	UN Number: Not Applicable

## 15. Regulatory Information

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.

International Regulations: Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.

European Community Labeling: Not a dangerous preparation.

European Inventory of New and Existing Chemicals Substances (EINECS):

This product is a medical device and not subject to chemical notification requirements.

Other: Not Applicable

## 16. Other Information

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex.

All components are synthetically produced; none are derived from animal products.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

**DENTSPLY/International  
DENTSPLY/Caulk  
Safety Data Sheet**

**1. Product and Company Identification**

Product Name <b>Lynal<sup>®</sup> Liquid</b>	SDS Code Number <b>553005-Liquid</b>
Trade Name & Synonyms <b>Lynal<sup>®</sup> Tissue Conditioner and Temporary Reliner</b>	Date of Last Revision <b>11/12/13</b>
Manufacturer <b>DENTSPLY/Caulk</b>	Address <b>38 West Clarke Avenue Milford DE 19963-1805 <a href="http://www.caulk.com">http://www.caulk.com</a>, <a href="http://www.dentsply.com">http://www.dentsply.com</a></b>
Grades or Minor Variant Identities Not Applicable	Information Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>
Product Use (for Canada) Not Applicable	Emergency Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>

**2. Hazard(s) Identification**



**Danger**

**Highly Flammable Liquid and Vapour**

Keep away from heat/sparks/open flames / hot surfaces.  
No smoking.  
Keep container tightly closed.  
Wear protective gloves/eye protection/face protection.  
Ground / Bond container and receiving equipment.  
Use explosion-proof electrical lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
IF ON SKIN or Hair: Remove / take off immediately all contaminated clothing.  
Rinse skin with water / shower.  
In case of fire: Use CO<sub>2</sub> sand or extinguishing powder.

**3. Composition/Information on Ingredients**

<b>Hazardous Components</b>	<b>C.A.S. Number</b>	<b>Exposure Limits</b>	<b>%</b>
Ethyl Alcohol	64-17-5	1000 ppm	< 10
Triethyl citrate	77-93-0	Not Established	> 90

Note: Flavor additive is artificial mint.

**4. First Aid Measures**

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Rinse opened eye for several minutes under running water. If symptoms persist consult physician	Not Applicable	Not Applicable
Skin	Immediately wash with soap and water and rinse thoroughly	Not Applicable	Not Applicable
Inhalation	Supply fresh air	Not Applicable	Not Applicable
Ingestion	If symptoms persist consult physician	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable

Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.

**5. Fire and Explosion Data**

Flashpoint Method: 18°C (64°F) Pensky-Martens Closed Cup	Flammable (Explosive) Limits in Air LEL: Not Established UEL: Not Established	Autoignition Temperature: Not Established	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids): Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: 3	



Extinguishing Media: Dry chemical, alcohol foam, or carbon dioxide. Water may be ineffective, but should be used to keep fire-exposed containers cool.	Extinguishing Media to Avoid: Water with full jet.
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.	
Unusual Fire and Explosion Hazards: Formation of toxic gases is possible during heating or in case of fire.	

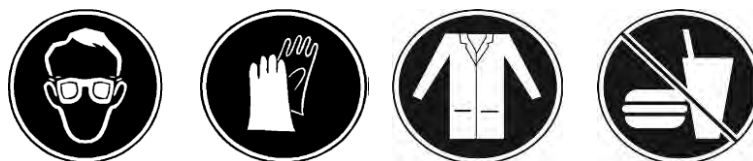
## 6. Accidental Release Measures

Containment Techniques: Wear proper personal protective equipment as described in section 8. Absorb spill with inert material (e.g. vermiculite, sand, earth), then place material in suitable labeled plastic or metal container.		
Spill/Leak Clean-up Procedures and Equipment: Absorb spill with inert material (e.g. vermiculite, sand, and earth), then place material in suitable labeled plastic or metal container. Ensure adequate ventilation.		
Evacuation Procedures: Not Applicable	Special Instructions: Not Applicable	Reporting Requirements: Not Applicable

## 7. Handling and Storage

Handling Practices and Warnings: Wash thoroughly after handling. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals. Avoid ingestion and inhalation.
Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store away from extreme heat, food and beverages.

## 8. Exposure Control / Personal Protection



Ventilation: None required during normal intended use of this product		Other Engineering Controls: Not Applicable
Routes of Entry	Personal Protective Equipment (PPE) for Normal Use	
Eye/Face	Safety Glasses	PPE for Emergencies
Skin	The glove material has to be impermeable and resistant to the product.	Not Applicable
Inhalation	Not Required for normal volumes used in Dental office.	Not Applicable
Body Protection	Protective work clothing	Not Applicable
General Hygiene Considerations and Work Practices: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.		
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable		
Other Protective Measures and Equipment: Not Applicable		

## 9. Physical and Chemical Characteristics

Appearance: Clear liquid.	Odor: Characteristic alcohol odor with mint.	
Normal Physical State: Low Viscosity Liquid	Melting Point: Not Established    Boiling Point: 109°C (228°F)	
Specific Gravity: 1.1 g/cm <sup>3</sup>	Solubility in Water: Partially	pH: Not Applicable
Vapor Pressure (mm Hg): N. A.	Vapor Density (AIR=1): Not Established	Evaporation Rate (Butyl Acetate =1) Not Established
Other: Not Applicable		

## 10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): High temperatures, strong oxidizing agents and acetyl chloride.	
Hazardous Products Produced During Decomposition: Carbon dioxide, and carbon monoxide from incomplete combustion.	
Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur	Conditions to Avoid: High Temperatures, ignition sources.
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid: High Temperatures, ignition sources.

## 11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: The plasticizer has an Oral LD <sub>50</sub> of 7952 mg/Kg.					
Emergency Overview: Material may cause eye irritation. Breathing vapors may cause drowsiness and dizziness.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Material causes severe eye irritation.	Single	Moderate	Irritation and possible corneal damage	Yes
Skin	Material may be an irritant and may be absorbed through the skin.	Single & Repeated	Moderate	Irritation or possible allergic response. Severe allergic response may result in breathing difficulties.	Yes
Inhalation	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.	Repeated	Moderate	Chronic inhalation may cause effects similar to those of acute inhalation. Causes respiratory tract irritation. May cause motor incoordination and speech abnormalities.	Yes

Ingestion	May cause irritation of the digestive tract.	Single & Repeated	Mild	Not Applicable	No
Other Central nervous system	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure Open sores and wounds of the skin. Individuals with known sensitivity to methacrylate acrylates, or urethane dimethacrylate resin used in Dental restorative products.					
Carcinogenicity NTP?: Not listed IARC monographs?: Not listed OSHA regulated?: No. All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.					
Potential Environmental Effects Do not allow to enter sewers/ surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4) Health = 1, Fire = 3, Reactivity = 1 Specific Hazard = None					

## 12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard class2 (Self-assessment): The ethyl alcohol in the product is apt to volatilizes, leech into the ground water, but no data on the rates of these processes can be found. Its fate in ground water is unknown. When released into water it will volatilize and probably degrade. It would not be expected to adsorb to sediment or bioconcentrate in fish. When released to the atmosphere it will photodegrade in hours to an estimated range of 4 – 6 days in less polluted areas.

## 13. Disposal Considerations

Regulations: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations

Properties (Physical/Chemical) Affecting Disposal: Dispose of material as liquid waste in a closed container.  
RCRA P-Series: None Listed, RCRA U-Series: None Listed. Waste Number D001 (Ignitable Waste)

## 14. Transport Information

Regulated for Shipping: Yes	Proper Shipping Name: Ethyl Alcohol Solution	Packing Group: II
Do Changes in Quantities, packaging, or shipment method change product classification? No	Hazard Class: 3	UN Identification Number: 1170
Other: Not Applicable		



Flammable Liquid

## 15. Regulatory Information

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: No chemicals have a reportable quantity. Report spills required under federal, state and local regulations. Many states have more stringent release reporting requirements.
RCRA U-Series Hazardous Waste Code : Not Applicable
Section 313 Toxic Chemicals: This product does not contain any chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372).
SARA Codes: CAS# 64-17-5 Ethyl Alcohol: immediate, delayed, fire.
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.
Clean Air Act: CAS# 64-17-5 Ethyl Alcohol: is not listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 ozone depleters. This material does not contain any Class 2 depleters.
Clean Water Act: CAS# 64-17-5 Ethyl Alcohol: is not listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.
WGK (Water Danger /Protection): CAS# 64-17-5 Ethyl Alcohol: 0
International Regulations: Hazard Symbol: Flammable XI F Risk Phrases: R11 Highly Flammable, R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36/37/38 Irritating to eyes, respiratory system. R68 Possible risks of irreversible effects. Safety Phrases: S7/9 Keep container tightly closed and in a well ventilated place. S16 Keep away from sources of ignition – No Smoking. S23 Do not breathe fumes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37 Wear suitable protective clothing and gloves. S60 This material and its container must be disposed of as hazardous waste.
Canada WHMIS for the CAS# 64-17-5 Ethyl Alcohol, classification of B2 D2A, Flammable Liquid is on the Canadian Ingredient Disclosure List.

## 16. Other Information

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex.

All components are synthetically produced; none are derived from animal products.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

**DENTSPLY/International  
DENTSPLY/Caulk  
Safety Data Sheet**

**1. Product and Company Identification**

Product Name <b>Lynal<sup>®</sup> Separator</b>	SDS Code Number <b>553005-Separator</b>
Trade Name & Synonyms <b>Lynal<sup>®</sup> Tissue Conditioner and Temporary Reliner</b>	Date of Last Revision <b>11/12/13</b>
Manufacturer <b>DENTSPLY/Caulk</b>	Address <b>38 West Clarke Avenue Milford DE 19963-1805 <a href="http://www.caulk.com">http://www.caulk.com</a>, <a href="http://www.dentsply.com">http://www.dentsply.com</a></b>
Grades or Minor Variant Identities Not Applicable	Information Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>
Product Use (for Canada) Not Applicable	Emergency Telephone Number <b>(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)</b>

**2. Hazard(s) Identification**

**N/A - Not Applicable**

**3. Composition/Information on Ingredients**

Hazardous Components	C.A.S. Number	Exposure Limits	%
Mineral Oil	8042-47-5	5 mg/M <sup>3</sup> (for oil mist)	100

**4. First Aid Measures**

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist consult physician	Not Applicable	Not Applicable
Skin	First aid is not normally required. However it is a good practice to wash any chemical from the skin.	Not Applicable	Not Applicable
Inhalation	First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air. Seek immediate medical attention.	Not Applicable	Not Applicable
Ingestion	First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable

Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.

**5. Fire and Explosion Data**

Flashpoint Method: >187.8°C (370°F)	Flammable (Explosive) Limits in Air LEL: Not Applicable UEL: Not Applicable	Autoignition Temperature: Not Determined	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids) Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: Not Applicable	
Extinguishing Media: Dry chemical, CO <sub>2</sub> , foam or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F (100°C). Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.		Extinguishing Media to Avoid: Water with full jet.	
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.			
Unusual Fire and Explosion Hazards: This material may burn, but will not ignite readily. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.			

**6. Accidental Release Measures**

Containment Techniques: This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release.		
Spill/Leak Clean-up Procedures and Equipment: Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into appropriate absorbent material.		
Evacuation Procedures: Not Applicable	Special Instructions: Not Applicable	Reporting Requirements: Not Applicable

**7. Handling and Storage**

Handling Practices and Warnings: Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals. Keep away from all ignition sources.
Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store in a cool, dry well-ventilated areas away from heat and all sources of ignition. Store away from food and beverages.

**8. Exposure Control / Personal Protection**



Ventilation: None required during normal intended use of this product		Other Engineering Controls: Not Applicable
Routes of Entry	Personal Protective Equipment (PPE) for Normal Use	PPE for Emergencies
Eye/Face	Safety Glasses	Not Applicable
Skin	The glove material has to be impermeable and resistant to the product.	Not Applicable
Inhalation	Not Required	Not Applicable
Body Protection	Protective work clothing	Not Applicable
General Hygiene Considerations and Work Practices: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.		
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable		
Other Protective Measures and Equipment: Not Applicable		

### 9. Physical and Chemical Characteristics

Appearance: Clear liquid		Odor: Odorless	
Normal Physical State: Liquid		Melting Point: Not Determined	Boiling Point: 310°C (590°F)
Specific Gravity: 0.88 g/cm <sup>3</sup>	Solubility in Water: Not soluble	pH: Not Applicable	
Vapor Pressure (mm Hg): <0.1	Vapor Density (AIR=1): >1	Evaporation Rate (Butyl Acetate =1) <1	
Other: Not Applicable			

### 10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): Strong oxidizing agents.	
Hazardous Products Produced During Decomposition: Carbon, nitrogen and sulfur oxides.	
Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur	Conditions to Avoid: None known
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid: Avoid all possible sources of ignition.

### 11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: Oral - the LD <sub>50</sub> for mineral oil in Rats is greater than 5,000 mg/Kg.					
Emergency Overview: No significant hazards for emergency responses are known.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Not known to be an eye irritant.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Skin	Not known to be an eye irritant. No harmful effects from skin absorption have been reported.	Repeated	Not Applicable	Not Applicable	Not Applicable
Inhalation	No harmful effects reported.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Ingestion	No harmful effects reported.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure: Open sores and wounds of the skin.					
Carcinogenicity NTP?: Not listed IARC monographs?: Not listed OSHA regulated?: No All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.					
Potential Environmental Effects Do not allow to enter sewers/ surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4), Health = 0, Fire = 1, Reactivity = 0					

### 12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard class1 (Self-assessment): slightly hazardous for water.
---

### 13. Disposal Considerations

Regulations: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of in accordance with Federal, State and Local regulations
Properties (Physical/Chemical) Affecting Disposal: Dispose of material as solid waste in a closed container.

### 14. Transport Information

Regulated for Shipping: No. Not Regulated	DOT Shipping Name: Not Regulated	Packing Group: Not Applicable
Do Changes in Quantities, packaging, or shipment method change product classification? No	DOT Hazard Class Not Applicable	UN Number: Not Applicable

### 15. Regulatory Information

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations
Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section

313 (40 CFR 372): None
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.
Canada Domestic Substance List: Listed
Canada WHMIS, Workplace Hazardous Materials Information System: This product is not a controlled product.
International Regulations: Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.
European Community Labeling: Not a dangerous preparation.
European Inventory of New and Existing Chemicals Substances (EINECS): This product is a medical device and not subject to chemical notification requirements.
Other: Not Applicable

## **16. Other Information**

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex. All components are synthetically produced; none are derived from animal products.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.