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**1. PRODUCT AND COMPANY IDENTIFICATION**

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**Product Name** Polyken 221, Polyken 231  
**Use/Size** Rubber Based Pressure Sensitive Adhesive  
**Product Numbers**  
**Manufacturer/Supplier** Covalence Adhesives  
**Address** 25 Forge Parkway  
Franklin, MA 02038  
**Phone Number** (800) 248-7659 (Monday – Friday 8:00 am to 5:00 pm)  
**Chemtrec Number** (800) 424-9300  
**Revision Date:**  
**MSDS Date:** August 25, 2006  
*This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)*

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**2. COMPOSITION/INFORMATION ON THE COMPONENTS**

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<b>Component Name</b>	<b>CAS#/Codes</b>	<b>Concentration</b>	<b>R Phrases</b>	<b>Classification</b>
Polymers and Rubbers	N.A.	<25%	None	None
Hydrocarbon resin	N.A.	<5%	None	None
Polymerized Rosin	N.A.	<20%	None	None
Kaolin Clay	1332-58-7	<10%	None	None
Zinc Oxide	1314-13-2	<6%	None	None
Quartz	14808-60-7	<0.5%	None	None

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**3. HAZARD IDENTIFICATION**

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**EU Main Hazards**

Not classified as hazardous.

**Routes of Entry**

- Inhalation - Skin contact

**Carcinogenic Status**

See Section 11 for information.

**Target Organs**

- Skin

**Health Effects - Eyes**

Contact may cause irritation due to mechanical abrasion.

**Health Effects - Skin**

Prolonged, repeated contact with adhesive may cause skin irritation.

**Health Effects - Ingestion**

Not an expected route of entry during normal handling and use.

**Health Effects - Inhalation**

Prolonged, repeated inhalation of adhesive may cause dizziness and drowsiness.

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#### 4. FIRST AID MEASURES

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**Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**

Wash skin thoroughly with soap and water. Obtain medical attention if blistering occurs or redness persists.

**Ingestion**

Obtain medical attention immediately.

**Inhalation**

Remove person to fresh air. Seek medical attention if symptoms persist.

**Advice to Physicians**

Treat symptomatically.

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#### 5. FIRE FIGHTING MEASURES

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**Extinguishing Media**

Water spray, carbon dioxide and dry chemical.

**Unusual Fire and Explosion Hazards**

May release hazardous vapors during a fire.

**Protective Equipment for Fire-Fighting**

Wear full protective clothing and self-contained breathing apparatus.

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#### 6. ACCIDENTAL RELEASE MEASURES

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No specific measures necessary. Prevent the material from entering drains or watercourses.

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#### 7. HANDLING AND STORAGE

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Keep away from heat and sources of ignition. Storage area should be: - cool - dry - well ventilated - away from incompatible materials

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Occupational Exposure Standards**

Exposure limits are listed below, if they exist.

**Polymers and Rubbers**

None established

**Hydrocarbon Resin**

None established

**Quartz**

ACGIH TLV for Quartz (silica-crystalline) is 0.05 mg/m<sup>3</sup> measured as respirable fraction of the aerosol

**Zinc Oxide, fume**

OSHA PEL 5 mg/m<sup>3</sup> TWA

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Zinc Oxide**

8hr TWA: 2mg/m<sup>3</sup> , measured as respirable fraction of aerosol  
STEL/CEIL : 10mg/m<sup>3</sup>, measured as respirable fraction of aerosol  
OSHA PEL(Dust only): 15mg/m<sup>3</sup> total dust, 5mg/m<sup>3</sup> respirable fraction

**Polymerized Rosin**

None established

**Kaolin Clay**

8hr TWA: 2mg/m<sup>3</sup> , measured as respirable fraction of aerosol  
OSHA PEL: 15mg/m<sup>3</sup> total dust, 5mg/m<sup>3</sup> respirable fraction

**Engineering Control Measures**

No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

**Respiratory Protection**

Respiratory protection not normally required.

**Hand Protection**

Not required under normal conditions of use. However, care should be taken to avoid contact with the adhesive.

**Eye Protection**

Safety glasses

**Body Protection**

Normal work wear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Polyethylene coated cloth backing with a rubber based pressure sensitive adhesive
<b>Color</b>	White, silver ,black, red, olive drab, or pea green backing with beige adhesive
<b>Odor</b>	Slight
<b>pH</b>	Not applicable
<b>Specific Gravity</b>	No data available
<b>Boiling Range/Point (°C/F)</b>	Not applicable
<b>Melting Point (°C/F)</b>	Not applicable
<b>Flash Point (PMCC) (°C/F)</b>	Not known
<b>Explosion Limits (%)</b>	No data available
<b>Vapor Pressure</b>	Not applicable
<b>Density</b>	No data.
<b>Solubility in Water</b>	Not known
<b>Vapor Density (Air = 1)</b>	Not applicable

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## 10. STABILITY AND REACTIVITY

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**Stability**

Stable under normal conditions.

**Conditions to Avoid**

- Heat - High temperatures

**Materials to Avoid**

Strong oxidizers

**Hazardous Polymerization**

Will not occur.

**Hazardous Decomposition Products**

- oxides of carbon - smoke - oxides of nitrogen - acrolein - aldehydes - alcohols - hydrocarbons  
- oligomers - waxes - sulfur oxides

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## 11. TOXICOLOGICAL INFORMATION

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**Acute Toxicity**

Low order of acute toxicity.

**Chronic Toxicity/Carcinogenicity**

This product is not expected to cause long term adverse health effects.

For "inhalable" crystalline silica (quartz): IARC Overall Evaluation is 1 (carcinogenic to humans), the quartz in this formulation is in an adhesive matrix and is not expected to be "inhalable"

**Genotoxicity**

This product is not expected to cause any mutagenic effects.

**Reproductive/Developmental Toxicity**

This product is not expected to cause adverse reproductive effects.

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## 12. ECOLOGICAL INFORMATION

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**Mobility**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bio-accumulation**

No relevant studies identified.

**Ecotoxicity**

The product may be harmful to aquatic organisms.

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## 13. DISPOSAL

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Dispose of in accordance with all applicable local and national regulations.

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## 14. TRANSPORT INFORMATION

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**DOT CFR 172.101 Data** Not Regulated

**UN Proper Shipping Name** Not Regulated

**UN Class** None.

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**14. TRANSPORT INFORMATION**

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<b>UN Number</b>	None.
<b>UN Packaging Group</b>	None.
<b>Classification for AIR Transportation (IATA)</b>	Consult current IATA Regulations prior to shipping by air.

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**15. REGULATORY INFORMATION**

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**EU Label Information**

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

**EC Annex I Classification**

According to EC Commission Directive 67/548/EEC this product is not classified.

**R phrases**

None.

**S phrases**

None.

**US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS****TSCA Listing**

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory.

**EINECS Listing**

All ingredients in this product have not been verified for inclusion on the European Inventory of Existing Commercial Chemical Substances (EINECS) or specifically exempted.

**DSL (Canadian) Listing**

All ingredients in this product have been verified for inclusion on the Domestic Substance List (DSL).

**MA Right To Know Law**

This product contains the following chemicals on the Massachusetts Right to Know Law: - Quartz (14808-60-7) <0.5% - Zinc Oxide (1314-13-2) <6.0% - Kaolin clay (1332-58-7) <10% - Mica (12001-26-2) <0.5%

**PA Right To Know Law**

This product contains the following chemicals on the Pennsylvania Hazardous Substance List: - Quartz (14808-60-7) <0.5% - Zinc Oxide (1314-13-2) <6.0% - Kaolin clay (1332-58-7) <10% - Mica (12001-26-2) <0.5%

**NJ Right To Know Law**

This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: - Quartz (14808-60-7) <0.5% - Zinc Oxide (1314-13-2) <6.0% - Kaolin clay (1332-58-7) <10% - Mica (12001-26-2) <0.5% - zinc 2-mercaptobenzothiazole (155-04-4) <0.5%

**California Proposition 65**

This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: - Quartz (14808-60-7) < 0.5%

**SARA Title III Sect. 302 (EHS)**

This product does not contain any chemicals subject to SARA Title III Section 302.

**SARA Title III Sect. 304**

This product does not contain any chemicals subject to SARA Title III Section 304.

**SARA Title III Sect. 311/312 Categorization**

Immediate (acute)

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**15. REGULATORY INFORMATION**

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**SARA Title III Sect. 313**

This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations. - Zinc Oxide (1314-13-2)

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**16. OTHER INFORMATION**

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**NFPA Ratings**

NFPA Code for Flammability - 0

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - 0

**HMIS Ratings**

HMIS Code for Flammability - 0

HMIS Code for Health - 1

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

**Abbreviations**

N/A: Denotes no applicable information found or available

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

R: Risk

S: Safety

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

BOD: Biological Oxygen Demand

KoC: Soil Organic Carbon Partition Coefficient

**For further information email:** [Technical.Adhesives@covcorp.com](mailto:Technical.Adhesives@covcorp.com)

**Prepared By:** EnviroNet LLC.

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