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**1. IDENTIFICATION**

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<b>Product Name</b>	Polyken 221, 231
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Identified uses</b>	Pressure Sensitive Adhesive
<b>Company Identification</b>	Berry Plastics Corporation 25 Forge Parkway Franklin, MA 02038
<b>Customer Information Number</b>	(800) 248-7659 (Monday – Friday 8:00 am to 5:00 pm) msdstechical@berryplastics.com
<b>Emergency Telephone Number</b>	
<b>Chemtrec Number</b>	Within USA and Canada: 1-800-424-9300 CCN22955 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)
<b>Issue Date</b>	June 26, 2014
<b>Supersedes Date</b>	March 8, 2010

*Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*

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**2. HAZARD IDENTIFICATION**

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**Hazard Classification**  
Acute hazard to the aquatic environment – Category 1 (This classification not adopted by OSHA)

**Label Elements**  
Hazard Symbols



Signal Word: Warning

**Hazard Statements**  
Very toxic to aquatic life.

**Precautionary Statements**

**Prevention**  
Avoid release to the environment.

**Response**  
Collect spillage.

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**2. HAZARD IDENTIFICATION**

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**Storage**

None

**Disposal**

Dispose of contents/container in accordance with local regulation.

**Other Hazards**

None identified.

**Specific Concentration Limits**

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	20 - 30%
Acute dermal toxicity	40 - 50%
Acute inhalation toxicity	90 - 100%
Acute aquatic toxicity	90 - 100%

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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**Synonyms:**

This product is a mixture.

<b>Component</b>	<b>CAS Number</b>	<b>Concentration</b>
Polymers and Resins	N.A.	25 - 35%
Polymerized Rosin	N.A.	10 - 20%
Inorganic Compound(s)	N.A.	1 - 10%
Zinc Oxide	1314-13-2	1 - 10%

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**4. FIRST- AID MEASURES**

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**Description of necessary first-aid measures****Eyes**

Immediately flood the eye with plenty of water. Obtain medical attention if symptoms persist.

**Skin**

Wash skin thoroughly with soap and water. Obtain medical attention if symptoms persist.

**Ingestion**

Obtain medical attention immediately.

**Inhalation**

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

**Most important symptoms/effects, acute and delayed**

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

**Indication of immediate medical attention and special treatment needed****Notes to Physicians**

Treat symptomatically.

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**5. FIRE - FIGHTING MEASURES**

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**Suitable Extinguishing Media**

Water spray, carbon dioxide and dry chemical.

**Specific hazards arising from the chemical**

May release hazardous vapors during a fire.

**Special Protective Actions for Fire-Fighters**

Wear full protective clothing and self-contained breathing apparatus.

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective clothing.

**Environmental Precautions**

Prevent the material from entering drains or watercourses.

**Methods and materials for containment and cleaning up**

Pick up and transfer into suitable containers for recovery or disposal.

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**7. HANDLING AND STORAGE**

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**Precautions for safe handling**

Wear appropriate protective clothing.

**Conditions for safe storage**

Store away from sources of heat or ignition. Storage area should be: cool - dry - well ventilated - out of direct sunlight - away from sources of ignition(heat, sparks, flames, pilot lights) - away from incompatible materials (see Section 10)

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Control parameters**

Exposure limits are listed below, if they exist.

**Zinc Oxide**

ACGIH: TLV 2 mg/m<sup>3</sup> 8h TWA, respirable fraction, 15 min STEL 10 mg/m<sup>3</sup>

OSHA: Z-1 PEL 5 mg/m<sup>3</sup>, zinc oxide fume

OSHA: Z-1 PEL 5 mg/m<sup>3</sup>, respirable fraction

OSHA: Z-1 PEL 15 mg/m<sup>3</sup>, total dust

**Appropriate engineering controls**

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

**Individual protection measures****Respiratory Protection**

Respiratory protection not normally required.

**Skin Protection**

Not required under normal conditions of use.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Eye/Face Protection**

Safety glasses

**Body Protection**

Normal work wear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**Appearance****Physical State** Solid: Polyethylene coated cloth backing with a rubber based pressure sensitive adhesive**Color** White, silver ,black, or olive drab backing with beige adhesive**Odor** Slight**Odor Threshold** No data available**pH** Not applicable**Density (g/yd<sup>2</sup>)** 270 - 280**Boiling Range/Point (°C/F)** Not applicable**Melting Point (°C/F)** Not applicable**Flash Point (PMCC) (°C/F)** Not applicable**Vapor Pressure** Not applicable**Evaporation Rate (BuAc=1)** Not applicable**Solubility in Water** Negligible**Vapor Density (Air = 1)** Not applicable**VOC (%)** 0**Partition coefficient (n-octanol/water)** Not applicable**Viscosity** Not applicable**Auto-ignition Temperature** No data available**Decomposition Temperature** No data available**Upper explosive limit** No data available**Lower explosive limit** No data available**Flammability (solid, gas)** No data available

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**10. STABILITY AND REACTIVITY**

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**Reactivity**

Data is not available.

**Chemical Stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Heat, sparks, flames - high temperatures - contact with incompatible materials

**Incompatible Materials**

Strong acids - bases - oxidizers

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**10. STABILITY AND REACTIVITY**

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**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**

Available data indicates this product is not expected to be acutely toxic.

**Specific Target Organ Toxicity (STOT) – single exposure**

Available data indicates this product is not expected to cause target organ effects after a single exposure.

**Specific Target Organ Toxicity (STOT) – repeat exposure**

Available data indicates this product is not expected to cause target organ effects after repeated exposure.

**Serious Eye damage/Irritation**

Available data indicates this product is not expected to cause eye irritation.

**Skin Corrosion/Irritation**

Available data indicates this product is not expected to cause skin irritation.

**Respiratory or Skin Sensitization**

Available data indicates this product is not expected to cause respiratory sensitization.

Polymerized rosin: Not found to be a skin sensitizer in the Guinea Pig Maximization Test (GPMT), and showed potential for mild skin sensitization in the Local Lymph Node Assay (LLNA) test.

**Carcinogenicity**

Not considered carcinogenic by NTP, IARC, and OSHA.

**Germ Cell Mutagenicity**

Available data indicates this product is not expected to be mutagenic.

**Reproductive Toxicity**

Available data indicates this product is not expected to cause reproductive toxicity or birth defects.

**Aspiration Hazard**

Not an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity**Zinc Oxide:

LC50 Rainbow trout, 96h, 1.1 mg/l

EC50 Daphnia magna, 48h, 0.098 mg/l

Aquatic Chronic - Category 1, Very toxic to aquatic life with long lasting effects (ECHA classification)

**Mobility in soil**

No relevant studies identified.

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**12. ECOLOGICAL INFORMATION**

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**Persistence/Degradability**

No relevant studies identified.

**Bioaccumulative Potential**

No relevant studies identified.

**Other adverse effects**

No relevant studies identified.

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**13. DISPOSAL CONSIDERATIONS**

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**Disposal Methods**

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

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**14. TRANSPORT INFORMATION**

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<b>DOT CFR 172.101 Data</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>UN Class</b>	None
<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.
<b>Environmental Hazards</b>	Not a marine pollutant

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**15. REGULATORY INFORMATION**

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**United States TSCA Inventory**

All components of this product are in compliance or are exempt from inventory listing requirements of the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

**Canada DSL Inventory**

All components of this product have not been verified for inclusion or are exempt from listing on the Domestic Substance List (DSL).

**WHMIS Classification**

None

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

**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: None

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

None

**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 - 0  
NFPA Code for Reactivity - 0  
NFPA Code for Special Hazards – None

**HMIS Ratings**

HMIS Code for Flammability - 0  
HMIS Code for Health - 0  
HMIS Code for Physical Hazard - 0  
HMIS Code for Personal Protection - See Section 8  
\*Chronic

**Legend**

ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstracts Service  
ECHA: European Chemicals Agency  
IARC: International Agency for Research on Cancer  
N/A: Denotes no applicable information found or available  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible Exposure Limit  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
TLV: Threshold Limit Value

**Information Source and References**

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

**Prepared By:** EnviroNet LLC.

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