

## Material Safety Data Sheet

### GP<sup>®</sup> 5236 RESI-SET<sup>®</sup> Phenolic Impregnating Resin

#### Section 1. Chemical Product and Company Identification

<b>Product / Trade Name</b>	GP <sup>®</sup> 5236 RESI-SET <sup>®</sup> Phenolic Impregnating Resin		
<b>Synonyms</b>	RPMS 5236; BLS-3536		
<b>Chemical Family</b>	Phenol-Formaldehyde Resin		
<b>Chemical Formula</b>	$(C_6H_6O \cdot CH_2O)_x$		
<b>Manufacturer</b>	<b>Georgia-Pacific Chemicals LLC</b> 2883 Miller Road Decatur, GA 30035 (770) 593-6874 (Non-Emergency) (800) 765-7374 (Customer Service)		
<b>Emergency Phone (24 hours):</b>	<b>CHEMTREC 1-800-424-9300</b>		

#### Section 2. Composition and Information on Ingredients

Hazardous Components	CAS #	% by Weight	ACGIH TLV <sup>™</sup>	OSHA PEL
Ethanol	64-17-5	25.0 max.	TWA: 1000 ppm	TWA: 1000 ppm
Phenol	108-95-2	12.0 max.	TWA: 5 ppm [skin]	TWA: 5 ppm [skin]
Formaldehyde	50-00-0	1.5 max.	CEIL: 0.3 ppm	TWA: 0.75 ppm STEL: 2 ppm
n-Propyl acetate	109-60-4	1.5 max.	TWA: 200 ppm STEL: 250 ppm	TWA: 200 ppm
Isopropanol	67-63-0	1.5 max.	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm

[skin] This notation indicates that absorption through skin can contribute significantly to overall exposure. TWAs are 8 hour exposures unless otherwise noted. STELs are 15 minute exposures unless otherwise noted.

#### Section 3. Hazards Identification

<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Note:</b> Personal protective equipment (PPE) is related to conditions of use. Determination of PPE is the responsibility of the employer. Refer to <b>Section 8 (Exposure Controls / Personal Protection)</b> of this MSDS for recommendations.
	<b>Fire Hazard</b> 3	
	<b>Reactivity</b> 1	
	<b>Personal Protection</b> ○	

**Emergency Overview** Clear, amber liquid; alcohol-phenolic odor.

**WARNING! Flammable liquid.** Keep away from heat, sparks, and flames. Vapors can travel to a source of ignition and flash back. Unvented containers may develop pressure on prolonged exposure to heat. Eye irritation or injury may result from exposure to this product. Prolonged contact may cause skin irritation.

### **Potential Health Effects**

**Eye contact** Contact with liquid or mist can cause severe eye irritation or injury. Vapors released from product can cause severe eye irritation. Symptoms may include redness, watering, itching, or a burning sensation in the eyes.

**Skin Contact** A prolonged single exposure may produce mild to moderate skin irritation. Symptoms may include itching, scaling, cracking, reddening, or blistering at the site of contact.

**Inhalation** This product is not expected to be toxic by inhalation. However, prolonged inhalation of vapors released from hot or curing product may be irritating to the nose, throat, and lungs. Symptoms may include coughing or shortness of breath, nausea, headaches, dizziness or drowsiness.

**Ingestion** Not expected to be orally toxic. In normal industrial use, ingestion is not considered a probable route of exposure.

**Chronic** This product contains formaldehyde which may cause cancer. Repeated or prolonged exposure to formaldehyde may cause skin sensitization, dermatitis, or other allergic reactions. The degree of sensitivity varies with individuals.

This product contains ingredients which may affect the following target organs:  
**Respiratory system, eyes, skin, central nervous system, kidneys, liver, blood**

See *Section 11* Toxicological Information for additional information.

### **Section 4. First Aid Measures**

**Eye contact** Immediately rinse with water. Remove contact lenses. Hold eyelids apart and flush eyes with water for at least 15 minutes. Get immediate medical attention.

**Skin Contact** Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists. Launder contaminated clothing before reuse.

**Inhalation** Remove to fresh air. Rest in half-upright position. Get medical attention if necessary.

**Ingestion** If conscious, immediately rinse mouth and give large quantities of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

### **Section 5. Fire and Explosion Data**

**Fire Hazards** **Flammable liquid.** Keep away from heat, sparks, open flame, or other ignition sources.

**Flash Point** approximately 85°F (29.4°C) [Pensky-Martens Closed Cup]

<b>Flammable Limits (% by volume)</b>	Ethanol	LOWER: 3.3	UPPER: 19
	Methanol	LOWER: 6	UPPER: 36.5

**Extinguishing Media** Use alcohol foam, carbon dioxide, or dry chemical.

**Fire Fighting Instructions** Use self contained breathing apparatus and protection for skin. Use water spray to cool fire exposed containers. Stay away from ends of container.

<b>Combustion Products</b>	Irritating fumes and toxic gases.
<b>Special Hazards</b>	<ul style="list-style-type: none"> <li>• CAUTION: Vapors can travel to a source of ignition and flash back.</li> <li>• Hazardous polymerization may take place if exposed to fire conditions.</li> <li>• Unvented containers can build up pressure if exposed to heat (fire) and rupture violently.</li> <li>• Water runoff can cause environmental damage. Dike and collect water used to fight fire.</li> </ul>

### Section 6. Accidental Release Measures

<b>Spill and Leak Procedures</b>	<ul style="list-style-type: none"> <li>• Turn off all sources of heat or ignition.</li> <li>• Stop leak if you can do so without risk.</li> <li>• Ventilate area with explosion-proof equipment.</li> <li>• Use PPE appropriate to spill size and risk of exposure.</li> <li>• Confine spillage and absorb on earth, sand, or other non-combustible absorbent material.</li> <li>• Retain all contaminated water for removal and treatment. DO NOT flush to sewer.</li> </ul>
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### Section 7. Handling and Storage

<b>Handling</b>	<ul style="list-style-type: none"> <li>• Flammable liquid. Avoid contact with eyes, skin, and clothing. Use proper protective equipment. (see <a href="#">Section 8</a>)</li> <li>• Avoid breathing mist or vapor. Use only in a well ventilated area.</li> <li>• Ground and bond containers when transferring material. Use explosion-proof pumps.</li> <li>• Unvented containers may develop pressure. Open with caution.</li> <li>• Wash thoroughly after handling.</li> <li>• Eyewash stations and safety showers should be easily accessible to areas where product is used.</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>• Keep away from heat, sparks, open flame, or other sources of ignition.</li> <li>• Do not store portable containers in direct sunlight.</li> <li>• Keep containers closed when not in use.</li> <li>• For maximum storage life, store at temperatures below 50°F (10°C).</li> <li>• Store away from incompatible materials. (see <a href="#">Section 10</a>)</li> </ul>

### Section 8. Exposure Controls / Personal Protection

<b>Personal Protective Equipment (PPE)</b>	<b>Eyes and Face:</b> Face shield with safety glasses or chemical safety goggles.
	<b>Skin:</b> Rubber or neoprene gloves. Wear additional protective clothing as appropriate to protect skin. Chemical resistant apron or other impervious clothing.
	<b>Respiratory:</b> If feasible engineering controls do not prevent overexposure, a full-face respirator with cartridges approved by NIOSH/MSHA for formaldehyde, organic vapors, and dusts/mists may be used only when exposure levels are known to be within the unit's capability. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any situation where air purifying respirators may not provide adequate protection.
<b>Engineering Controls</b>	Use ventilation as necessary to keep exposure to airborne contaminants below the exposure limits. Use explosion-proof ventilation equipment.

### Section 9. Physical and Chemical Properties

<b>Physical appearance</b>	Clear, amber liquid
<b>Odor</b>	alcohol-phenolic
<b>pH (as is)</b>	approximately 7.3
<b>Boiling Point</b>	approximately 175°F (79.4°C)

<b>Melting Point</b>	not applicable
<b>Specific Gravity (25°C)</b>	approximately 1.13
<b>Vapor Pressure (mm Hg)</b>	not available
<b>Vapor Density</b>	not available
<b>% Volatile (w/w)</b>	approximately 38%
<b>Solubility in Water</b>	insoluble

### Section 10. Stability and Reactivity Data

<b>Chemical Stability</b>	This product is stable under the recommended storage conditions.
<b>Conditions to Avoid</b>	Avoid storage in unagitated bulk containers. Avoid storage at temperatures above 80°F (26.7°C). (see <a href="#">Section 7</a> )
<b>Incompatibility with Other Materials</b>	Avoid contact or contamination with strong oxidizers, acids, modified phenols (e.g. resorcinols, cresols) and isocyanates.
<b>Hazardous Decomposition Products</b>	None known.
<b>Hazardous Polymerization</b>	Unagitated, bulk material may slowly exotherm when stored at temperatures above 80°F (26.7°C). These conditions may result in hazardous exothermic polymerization at temperatures above 104°F (40.0°C), or if mixed with incompatible materials.
<b>Special Remarks</b>	Elevated storage temperatures will shorten product storage life. Product may darken with time.

### Section 11. Toxicological Information

<b>Eye</b>	A similar product was a severe eye irritant when tested as described in <a href="#">29 CFR 1910.1200</a> , Appendix A (OSHA Hazard Communication Standard).
<b>Dermal</b>	The effects of skin exposure to this product are not known. This product may be a skin irritant but is not expected to be dermally toxic.
<b>Inhalation</b>	A similar product was not toxic by inhalation when tested as described in <a href="#">29 CFR 1910.1200</a> , Appendix A (OSHA HCS).
<b>Oral</b>	A similar product was not orally toxic when tested as described in <a href="#">29 CFR 1910.1200</a> , Appendix A (OSHA HCS).
<b>Subchronic Effects</b>	Exposure to formaldehyde may cause temporary irritation to the nose and throat and may lead to respiratory disorders. However, in a thorough review of sensory/respiratory irritation studies of formaldehyde from the standpoint of occupational exposure, an expert panel has observed that exposure to concentrations of 0.3 ppm or lower failed to produce irritation. Individuals, in general, do not report irritation until concentrations reach 0.5 - 1 ppm. Respiratory disorders studies have concluded the threshold for long-term exposures causing chronic pulmonary effects is between 0.4 and 3 ppm and chronic obstructive pulmonary disease is 2 ppm. Additionally, persons with asthma responded no differently than healthy individuals at concentrations as high as 3 ppm. Pre-existing respiratory disorders may be aggravated by exposure.
<b>Chronic Effects</b>	

**Carcinogenicity** The International Agency for Research on Cancer (IARC) classifies formaldehyde as a carcinogen. This classification is based on the increased occurrence of a rare cancer of the nasopharyngeal cavity. IARC determined that there was insufficient evidence of other cancers including cancer of the oral cavity, oro- and hypopharynx, larynx, lung, sinonasal cavity, pancreas, brain and leukemia. The National Toxicology Program (NTP) includes formaldehyde in its Annual Report on Carcinogens. OSHA regulates formaldehyde as a potential carcinogen for exposures at or exceeding 0.5 ppm.

**Target Organs** See *Section 3*.

### Section 12. Ecological Information

**Ecotoxicity** This product is biodegradable under aerobic and anaerobic conditions.

### Section 13. Disposal Considerations

**Waste Disposal** Dispose of absorbed material in accordance with all federal, state, and local regulations. Dispose of contaminated water in a contained waste treatment system.

**RCRA** This product has a flash point less than 140°F. Upon disposal, it would be considered a hazardous waste exhibiting the characteristic of ignitability (Hazardous Waste No. D001).  
**Note:** If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

### Section 14. Transportation Information

**DOT** Regulated as indicated below.

Shipping Description	Rail Cars & Tank Trucks	Tote-bin Quantities or Less
<b>Proper Shipping Name</b>	Resin solution	Resin solution
<b>Hazard Class</b>	3	3
<b>Identification Number</b>	UN 1866	UN 1866
<b>Packing Group</b>	III	III
<b>Reportable Quantities</b>	RQ (Phenol, Formaldehyde)	Not applicable.
<b>Placards / Labels</b>	<b>Placards:</b> Flammable.	<b>Labels:</b> Flammable liquid
<b>Special Provisions for Transport</b>	None.	When shipping by air, consult the IATA regulations.

### Section 15. Regulatory Information

**Federal Regulations** *The following regulations may have reporting requirements for the components listed. See "Key to Abbreviations and Acronyms" under Section 16 for definitions.*

**CERCLA / SARA  
Emergency Reporting** A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements. Consult counsel for further guidance on your responsibilities under these laws.

**Phenol, Formaldehyde**

<b>SARA Title III Section 313 Supplier Notification</b>	This product is known to contain the following chemicals which are listed in <u>40 CFR 372.65</u> as toxic chemicals requiring notification. This information must be included in all MSDS's that are copied and distributed for this product.									
	<table border="1"> <thead> <tr> <th><u>Component</u></th> <th><u>CAS #</u></th> <th><u>% by Weight</u></th> </tr> </thead> <tbody> <tr> <td>Phenol</td> <td>108-95-2</td> <td>12.0 max.</td> </tr> <tr> <td>Formaldehyde</td> <td>50-00-0</td> <td>1.5 max.</td> </tr> </tbody> </table>	<u>Component</u>	<u>CAS #</u>	<u>% by Weight</u>	Phenol	108-95-2	12.0 max.	Formaldehyde	50-00-0	1.5 max.
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Phenol	108-95-2	12.0 max.								
Formaldehyde	50-00-0	1.5 max.								
<b>CWA Section 307</b>	The following chemicals are listed under Section 307 as toxic pollutants <u>not</u> eligible for waiver from best available technology economically achievable (BAT) effluent limitations. <b>Phenol</b>									
<b>CWA Section 311</b>	The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA. <b>Phenol, Formaldehyde</b>									
<b>TSCA</b>	All components of this product are listed on the Toxic Substances Control Act Inventory or are excluded from listing requirements.									
<b><u>Other Regulations</u></b>	See the OSHA Formaldehyde Standard <u>29 CFR 1910.1048</u> for worker training, workplace monitoring, and medical surveillance requirements.  <u>California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):</u> This product contains the following substance(s) known to the State of California to cause cancer: <b>Formaldehyde</b>  <u>Canada:</u> All components of this product are listed on the Canadian Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.									

### Section 16. Other Information

<b>FDA Status</b>	Not applicable.
<b>Other Special Considerations</b>	<b>CAUTION:</b> Empty containers may contain product residue. Continue to observe recommended safety precautions when handling empty containers.
<b>Supersedes Date</b>	12/09/2004
<b>Section(s) Changed Since Last Revision</b>	2. Composition and Information on Ingredients
<b>Key to Abbreviations and Acronyms</b>	ACGIH - American Conference of Governmental Industrial Hygienists ANSI - American National Standards Institute CEIL - Ceiling value CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act CFR - Code of Federal Regulations CWA - Clean Water Act DOT - Department of Transportation FDA - Food and Drug Administration HCS - Hazard Communication Standard HMIS - Hazardous Materials Information System IARC - International Agency for Research on Cancer LC <sub>50</sub> - The concentration of a material expected to kill 50% of an animal test group. LC <sub>Lo</sub> - Lowest lethal concentration of a substance LD <sub>50</sub> - The dose of a material expected to kill 50% of an animal test group. LD <sub>Lo</sub> - Lowest lethal dose of a material MSHA - Mine Safety and Health Administration N.O.S. - Not Otherwise Specified

NFPA	- National Fire Protection Association
NIOSH	- National Institute for Occupational Safety and Health
NTP	- National Toxicology Program
OSHA	- Occupational Safety and Health Administration
PEL	- Permissible Exposure Limit (OSHA)
RCRA	- Resource Conservation and Recovery Act
RQ	- Reportable Quantity
SARA	- Superfund Amendments and Reauthorization Act
STEL	- Short Term Exposure Limit
TLV	- Threshold Limit Value (recommended by ACGIH)
TSCA	- Toxic Substances Control Act
TWA	- Time Weighted Average

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**IMPORTANT:**

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