1. PRODUCT AND COMPANY IDENTIFICATION

Product name: GELVA® MULTIPOLYMER EMULSION 2333

Reference Number: 000000000485

Date: 09/14/2005

Company Information:

**United States:**
Cytec Surface Specialties Inc.
1950 Lake Park Drive
Smyrna, GA 30080
Emergency telephone: CHEMTREC: 1-800-424-9300
For Product Information call: 1-800-652-6013 or 1-973-357-3193

**Canada:**
Surface Specialties Canada Inc.
Garner Road, P.O. Box 240
Niagara Falls, Ontario, Canada L2E 6T4
Emergency telephone: 1-905-356-8310
For Product Information call: 1-800-652-6013 or 1-973-357-3193

**Mexico/Latin America:**
Cytec de Mexico S.A. de C.V.
KM. 40 Carretera Guadalajara-La Barca
Atequiza, Jalisco, Mexico C.P. 45860
Emergency telephone:
In Mexico: 01-(376)-737-0004
Outside Mexico: (52)-(376)-737-0004
For Product Information call:
In Mexico: 01-(555)-531-6771
Outside Mexico: (52)-(555)-531-6771

**Brazil:**
Especialidades para Superfícies Ltda.
Avenue Jorge Bei Maluf,
2105 Vila Teodoro
CEP 08686-000 Suzano, SP, Brasil
Emergency telephone: (52)-(376)-737-0004
For Product Information call: (55)-11-4745-8569

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Average concentration</th>
<th>Concentration range</th>
<th>Units (wt./wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>acrylic copolymer</td>
<td></td>
<td></td>
<td>&gt;=48.0 - &lt;=53.0 %</td>
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</tr>
<tr>
<td>water</td>
<td>7732-18-5</td>
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<td>&gt;=42.0 - &lt;=47.0 %</td>
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<tr>
<td>vinyl acetate</td>
<td>108-05-4</td>
<td></td>
<td>&lt;0.05</td>
<td></td>
</tr>
</tbody>
</table>

1 The specific chemical identity (including CAS No.) and/or concentration is being withheld because it is trade secret.
3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form: viscous, liquid
Colour: white
Odour: acrid

WARNING STATEMENTS

No significant hazards associated with this material

POTENTIAL HEALTH EFFECTS

Likely routes of exposure: eye and skin contact
inhalation

Eye contact: No more than slightly irritating to eyes.

Skin contact: No more than slightly irritating to skin.
No more than slightly toxic if absorbed.

Inhalation: No more than slightly irritating
No more than slightly toxic if inhaled.

Ingestion: No more than slightly toxic if swallowed.
Significant adverse health effects are not expected to develop if only small
amounts (less than a mouthful) are swallowed.

Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

If in eyes: Immediate first aid is not likely to be required.
This material should be removed with water.

If on skin: Immediate first aid is not likely to be required.
This material can be removed with water.
Wash heavily contaminated clothing before reuse.

If inhaled: Immediate first aid is not likely to be required.
If symptoms occur, remove to fresh air.
Remove material from eyes, skin and clothing.

If swallowed: Immediate first aid is not likely to be required.
A physician or Poison Control Center can be contacted for advice.
Wash heavily contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES
Flash point: Non flammable aqueous solution

Hazardous products of combustion: carbon dioxide; carbon monoxide (CO); smoke; soot

Extinguishing media: Water spray, foam, dry chemical, or carbon dioxide

Unusual fire and explosion hazards: None known

Fire fighting equipment: Firefighters, and others exposed, wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protection recommended in section 8.

Environmental precautions: Keep out of drains and water courses.

Methods for cleaning up: Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush spill area with water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE

Handling
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Emptied containers retain vapour and product residue. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. The reuse of this material's container for non-industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

Storage

Temperature: 10 - 32 °C

General: Freeze sensitive.
After prolonged storage (greater than 6 months) products tends to settle and may require agitation to redispense.
Stable under normal conditions of handling and storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection: Does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

Hand protection: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Consult the glove/clothing manufacturer to determine the appropriate type
glove/clothing for a given application.

Body protection: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wash contaminated skin thoroughly after handling.

Respiratory protection: This material is not likely to present an airborne exposure concern under normal conditions of use. Avoid breathing vapour or mist. Use approved respiratory protection equipment when airborne exposure limits are exceeded. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

Ventilation: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. If practical, use local mechanical exhaust ventilation at sources of air contamination such as processing equipment.

Airborne exposure limits: (ml/m³ = ppm)

GELVA® MULTIPOLYMER EMULSION 2333

No specific occupational exposure limit has been established.

vinyl acetate

ACGIH TLV: 10 ml/m³ ; 8-hr TWA
ACGIH TLV: 15 ml/m³ ; 15-min STEL
A3: The ACGIH has designated this component as an "A3" substance thereby including it among substances that are confirmed animal carcinogens with unknown relevance to humans.

OSHA PEL.: 10 ml/m³ ; 8-hr TWA
OSHA PEL.: 20 ml/m³ ; 15-min STEL
Mexican OEL: 10 ml/m³ ; 30 mg/m³ ; 8-hr TWA
Mexican OEL: 20 ml/m³ ; 60 mg/m³ ; 15-min STEL

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity: 1.01 @ 25 °C

pH: 4.5 - 5.5

Boiling point: 100 °C
Water solubility: completely miscible

Viscosity: 300 - 700 mPa.s @ 25 °C
10. STABILITY AND REACTIVITY

Conditions to avoid: Do not expose to extreme temperatures.

Materials to avoid - None known
Hazardous reactions: Hazardous polymerization does not occur.
Hazardous decomposition products: None known;

11. TOXICOLOGICAL INFORMATION

This product has been tested for toxicity. Results from Cytec sponsored studies or from the available public literature are described below.

Acute animal toxicity data

Oral: LD50, rat, > 5,000 mg/kg, Practically nontoxic following oral administration.

Dermal: LD50, rabbit, > 5,000 mg/kg, Practically nontoxic after skin application in animal studies.

Eye irritation: rabbit, Practically non irritating to eyes (rabbit), 24 h

Skin irritation: rabbit, Practically non irritating to skin (rabbit), 4 h
rabit, Practically non irritating to skin (rabbit), 24 h

Skin sensitization: Human experience, These materials demonstrated a potential for cumulative irritation but primary irritation and allergic skin reactions were not observed. Data obtained on similar product.

Mutagenicity: No genetic effects were observed in standard tests using bacterial and animal cells. Data obtained on similar product.

Components

Data from Cytec studies and/or the available scientific literature on the components of this material which have been identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Hazardous Products Act are discussed below.

vinyl acetate Irritating to eyes, skin and respiratory tract.
Can cause blisters.
Can cause injury to the eyes.
Slightly toxic following oral administration.
Practically nontoxic after skin application in animal studies.
Slightly toxic based on animal inhalation exposure studies.
No adverse effects noted following repeated oral administration.
Repeated inhalation exposure produced changes to the lungs in animal models. This material produced tumours in laboratory animals. Listed as "possibly carcinogenic to humans" (Group 2B) by the International Agency for Research on Cancer (IARC).

No birth defects were noted in rats given the active ingredient orally during pregnancy. This material impaired fertility of laboratory animals below dose levels toxic to parental animals. The weight of the evidence indicates that this material is mutagenic in in vitro assays.

12. ECOLOGICAL INFORMATION

This product has not been tested for environmental toxicity or biodegradation, but data obtained on a similar products are summarised below:

Environmental Toxicity:

| Invertebrates | 48 h, EC50 | Water flea (Daphnia magna) | > 1000 mg/l |
| Fish:         | 96 h, LC50 | Bluegill sunfish (Lepomis macrochirus) | > 1000 mg/l |
|               | 96 h, LC50 | Rainbow trout (Oncorhynchus mykiss) | > 1000 mg/l |

13. DISPOSAL CONSIDERATIONS

US EPA RCRA Status: This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261.

Disposal considerations: Incineration 
Recycle

Miscellaneous advice: Local, state, provincial, and national disposal regulations may be more or less stringent. Consult your attorney or appropriate regulatory officials for information on such disposal. This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

**US DOT**
Other: NOT REGULATED FOR TRANSPORT.

**Canadian TDG**
Other: NOT REGULATED FOR TRANSPORT.

15. REGULATORY INFORMATION
All components are in compliance with the following inventories: U.S. TSCA, Canadian DSL, EU EINECS, Australian AICS, Japanese ENCS, Phillipine PICCS, Chinese

Other chemical inventory information: The polymer contained within this product is exempt from listing in the European Inventory. The monomers used to manufacture this polymer are listed as required, as are all other components of this product.

Canadian WHMIS classification: Not Controlled

SARA Hazard Notification:

Hazard Categories Under Title III Rules (40 CFR 370): Not applicable

Section 302 Extremely Hazardous Substances: vinyl acetate

Section 313 Toxic Chemical(s): vinyl acetate

CERCLA Reportable Quantity:

5,000 lb vinyl acetate

For this/these chemicals, release of more than the Reportable Quantity to the environment in a 24 hour period requires notification to the National Response Center (800-424-8802 or 202-426-2675).

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

Safety data sheet also created in accordance with Brazilian law NBR 14725

16. OTHER INFORMATION

Product use: Adhesive, binding agents

Reason for revision: Company name change.

<table>
<thead>
<tr>
<th>Suggested NFPA Rating</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Additional Information</th>
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<tr>
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<td>1</td>
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Suggested HMIS Rating: 1 0 0 B

Prepared by the Cytec Surface Specialties Product Stewardship Group. Please contact us @ 1-800-433-2873 if further information is needed. See page header for date of preparation.

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