1 PRODUCT AND COMPANY IDENTIFICATION

Common Name  WILSONART® 3100 Adhesive Series

Includes:
- WILSONART® 3100 Adhesive
- WILSONART® 3102 UV Adhesive
- WILSONART® 3105 Adhesive
- WILSONART® 3116 Adhesive
- WILSONART® 3121 Adhesive
- WILSONART® 3131 Adhesive
- WILSONART® 3132 Adhesive

MANUFACTURER  WILSONART INTERNATIONAL, INC.
P.O. BOX 6110 - 2400 WILSON PLACE
TEMPLE, TX 76503
INFORMATION PHONE:  800-433-3222 (USA)

Trade Name  WA 3100 Adhesive Series or Lokweld 3100 Adhesive Series

MATERIAL USES  Adhesive for laminate

Revision #  2

In Case of Emergency Contact:

CHEMTREC:  800-424-9300 (USA)
            703-527-3887 (INTERNATIONAL)

2 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinyl alcohol</td>
<td>9002-89-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>(Except 3131, RN#4455)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinyl acetate polymers</td>
<td>N/A</td>
<td>40 - 70</td>
</tr>
<tr>
<td>(RN#4453, 4455, 4456, 4458, 4459)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>15 - 40</td>
</tr>
<tr>
<td>(RN#4453, 4455, 4456, 4458, 4459)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>1 - 5</td>
</tr>
<tr>
<td>(3121, RN#4459* only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aromatic diester</td>
<td>NJTSRN 950001</td>
<td>1 - 5</td>
</tr>
<tr>
<td>(3116, 3131, 3132, RN#4453, RN#4455, RN#4456)*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See Section 15 for Canadian HMIRC Registry Number exemptions.

3 HAZARDS IDENTIFICATION

Route of Entry:  Skin, eyes, and respiratory tract.

Target Organs:  None.

Inhalation:  Breathing vapors may cause irritation to the respiratory tract.
May cause skin irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Not an expected route of entry. If ingested it may cause irritation to gastro-intestinal tract.

**FIRST AID MEASURES**

**Inhalation:** Remove patient to fresh air. If patient is having difficulty breathing seek immediate medical attention. If not breathing, clear airway and start mouth-to-mouth artificial respiration (or use bag-mask respirator). Get immediate medical attention.

**Skin Contact:** Wash affected areas with soap and water. If irritation develops, seek medical attention.

**Eye Contact:** Flush eyes with water for 15 minutes. Remove contact lenses prior to water flush. Seek medical attention.

**Ingestion:** DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious person. Get immediate medical attention.

**FIRE FIGHTING MEASURES**

**Flash Point:** Not Applicable.

**Flash Point Method:** Not Applicable.

**Autoignition Temperature:** Not Applicable.

Material is not flammable. Dry adhesive will burn.

In case of fire use water, dry chemical, or CO2.

Use extinguishing media appropriate for surrounding materials.

Wear self contained breathing apparatus and protective gear appropriate for surrounding materials.

Hazardous decomposition products include carbon oxides (CO, CO2) and acetic acid.

**ACCIDENTAL RELEASE MEASURES**

Personal precautions:
Wear appropriate PPE. Make sure work area is well ventilated. Spilled adhesive may be slippery.

Environmental precautions:
Keep out of sewers or drains.

Clean-up methods
Dike and contain spill. Absorb spilled product with vermiculite, dry sand, or earth. Dispose in a suitable container.

7 HANDLING AND STORAGE

Handling Precautions: Avoid breathing vapors. Handle in well ventilated areas. Avoid freezing and boiling temperatures.

Storage Requirements: Avoid freezing and boiling temperatures. Minimize contact with atmospheric air to prevent inoculation with microorganisms.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in a well ventilated area.

Protective Equipment: Wear approved safety glasses with side shields. Wear latex gloves. Wear normal work clothing. Ensure a functioning eye wash is either in or near the work area.

Exposure Guidelines/Other: 

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl acetate monomer</td>
<td>OSHA PEL: 10 ppm; ACGIH TLV 10 ppm (All, RN#4453, 4455, 4456, 4458, 4459)* STEL 20 ppm</td>
</tr>
<tr>
<td>Starch</td>
<td>OSHA:15 mg/m3 (total); ACGIH TLV:10 mg/m3 (All, RN#4453, 4455, 4456, 4458, 4459)* Respirable 5 mg/m3</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>ACGIH TLV: 100 mg/m3 (3121 only, RN#4459*) ceiling (aerosol)</td>
</tr>
</tbody>
</table>

*See Section 15 for Canadian HMIRC Registry Number exemptions.

Consult local authorities and local regulations for exposure limits.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White mobile liquid.

Physical State: Liquid.

Odor: Mild sweet.

pH: 4 - 6 (acidic)

Vapor Pressure: Equivalent to water.

Vapor Density: Equivalent to water.

Boiling Point: Similar to water.

Freezing/Melting Pt.: Similar to water.

Solubility: Soluble.

Spec Grav./Density: 1.1 - 1.2

VOC: < 20g/L

Viscosity: Varying by type.

10 STABILITY AND REACTIVITY

Stability: Stable as supplied. Coagulation may occur following freezing/thaw cycle or boiling.

Conditions to avoid: Extreme temperatures.
Materials to avoid (incompatibility): Copper and copper alloys, strong acids, and alkalis.

Hazardous Decomposition products: Carbon oxides (CO2, CO) and acetic acid.

Hazardous Polymerization: Will not polymerize.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:
None reported.

Chronic toxicity:
All
These products may contain trace amounts of vinyl acetate monomer (VAM) and ACGIH evaluates VAM as an A3-Animal Carcinogen. Available evidence suggests that VAM is not likely to cause cancer in humans except under uncommon or unlikely routes of exposure, but because VAM can be metabolized to acetaldehyde, which has an IARC 2B classification (possibly carcinogenic to humans), these products have also been listed under IARC Category 2B WA 3116 (RN#4453*); WA3131 (RN#4455*); WA 3132 (RN#4456*)
Chronic ingestion of an ingredient in these products has been shown to cause tumors in laboratory animals. An ingredient in these products has been shown to be a reproductive toxin in laboratory animals.
WA 3121 (RN#4459*)
Chronic ingestion of an ingredient in this product has been shown to cause adverse effects on the kidneys, the bone marrow, and sperm of laboratory animals. An ingredient in this product has been shown to be a teratogen in laboratory animals.

*See Section 15 for Canadian HMIRC Registry Number exemptions.

12 ECOLOGICAL INFORMATION

Ecotoxicity Not available.
BOD5 and COD Not available.
Biodegradable/OECD Not available.
Mobility Not available.
Toxicity of the Products of Biodegradation Not available.

Special Remarks on the Products of Biodegradation No additional remark.

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State, and local regulations.

14 TRANSPORT INFORMATION

DOT Classification - Resin Compound - Not DOT Regulated//Keep from freezing
Proper Shipping Name - Adhesive Resin Compound
Markings - None
Packaging instructions - Keep from freezing
Marine Pollutant - NO
TDG hazard class - None
15  REGULATORY INFORMATION

U.S. Federal Regulations
CERCLA Reportable quantity (Rg) values:
Vinyl acetate monomer  5000 lbs.
Acetaldehyde          1000 lbs.

TSCA inventory: The chemicals in this product are listed.
SARA 302/304/311/312 extremely hazardous substances: None.
SARA 302/304 emergency planning and notification: None.
SARA 302/304/311/312 hazardous chemicals: None.
SARA 311/312 MSDS distribution, chemical inventory, hazard identification: None.
SARA 313 toxic chemical notification and release reporting: None.
CWA 307: None.
CWA 311: None.
CAA 112 accidental release prevention: None.
CAA 112 regulated flammable substances: None.
CAA 112 regulated toxic substances: None.

International Regulations

EINECS - None.
DSL - R36/37 - Irritating to eyes and respiratory system.
WHIMS - D2A.

State Regulations

Pennsylvania RTK:
Vinyl acetate monomer, acetaldehyde
Minnesota:
Vinyl acetate monomer, acetaldehyde
Massachusetts RTK:
Vinyl acetate monomer, acetaldehyde
New Jersey RTK:
Vinyl acetate monomer, acetaldehyde
Rhode Island:
Vinyl acetate monomer, acetaldehyde
California Prop. 65:
Warning. This product may contain trace amounts of vinyl acetate monomer, acetaldehyde and formaldehyde, chemicals known to the State of California to cause cancer or reproductive toxicity.

16  OTHER INFORMATION

References

TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Agents, ACGI Worldwide, Cincinnati, 2003.
Glossary

ACGIH - American Conference of Governmental Industrial Hygienists
ASTM - American Society for Testing and Materials
ADR - Agreement on Dangerous Goods by Road (Europe)
BOD5 - Biological Oxygen Demand in 5 days
CAA - Clean Air Act
CAS - Chemical Abstracts Services
CEPA - Canadian Environmental Protection Act
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CWA - Clean Water Act
DOT - Department of Transportation
DSCL - Dangerous Substances Classification and Labeling (Europe)
DSL - Domestic Substance List (Canada)
EEC/EU - European Economic Community/European Union
EINECS - European Inventory of Existing Commercial Chemical Substances
HCS - Hazard Communication System
HMIS - Hazardous Material Information System
IARC - International Agency for Research on Cancer
LD50/LC50 - Lethal Dose/Concentration kill 50%
LDLo/LCLo - Lowest Published Lethal Dose/Concentration
NFPA - National Fire Prevention Association
NIOSH - National Institute for Occupational Safety & Health
NTP - National Toxicology Program
OSHA - Occupational Safety & Health Administration
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
SARA - Superfund Amendments and Reorganization Act
STEL - Short Term Exposure Limit (15 minutes)
TDG - Transportation of Dangerous Goods (Canada)
TLV-TWA - Threshold Limit Value-Time Weighted Average
TSCA - Toxic Substances Control Act
WHMIS - Workplace Hazardous Material Information System

CHEMTREC:
800-424-9300 (USA)
703-527-3887 (International)

Notice to Reader
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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

END OF MSDS DOCUMENT