



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product/Trade Name: AQUATAC® E 6180

Chemical Name: Trade Secret

Generic Name: Rosin Ester Dispersion

CAS Number: Mixture. See Section 3 and 15.

Product Uses: Waterborne pressure sensitive adhesives

Supplier/Manufacturer: Arizona Chemical Company
P.O. Box 550850
Jacksonville, FL32255-0850
USA
(800) 526-5294
(904) 928-8700

EMERGENCY PHONE: Chemtrec: 1-800-424-9300 (transportation and medical)

Section 2. Hazards Identification

Classification: Product is not classified as hazardous under GHS criteria or OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Label Elements:

Signal Word(s): None

Hazard Statement(s): None

Precautionary Statement(s): None

Other information: Product is a milky white liquid with a mild odor.

Routes of Exposure and Potential Health Effects:

Eye: Liquid or vapors may irritate the eyes. If heated product contacts the eye, thermal burns may result.

Skin: Product may cause skin irritation. If heated, product can cause thermal burns.

Inhalation: Inhalation of mists/vapors/fumes generated by heating this product may cause respiratory tract irritation with throat discomfort, coughing and difficulty breathing.

Ingestion: Ingestion of large quantities may result in gastrointestinal disturbances including irritation, nausea, and diarrhea.

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Section 3. Composition and Information on Ingredients
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| Name | CASRN/Trade Secret Number | Weight % |
|-------------------------|---------------------------|----------|
| 1) Modified Rosin Ester | 8050-31-5 | 55 |
| 2) Water | 7732-18-5 | 40 |
| 3) Proprietary | NJTSRN 7360 | 5 |

See section 8 for Exposure Controls/ Exposure Limits/Personal Protection information.

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Section 4. First Aid Measures
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- Eye Contact:** Immediately flush eyes with flooding amounts of cool, low-pressure water for at least 15 minutes. If irritation persists, get medical attention.
- Skin Contact:** In case of skin contact, wash immediately with soap and water. If irritation develops or persists, get medical attention. Launder contaminated clothing before reuse.
- Inhalation:** Move person to non-contaminated air. If affected person is not breathing, apply artificial respiration. Seek medical attention.
- Ingestion:** If swallowed, contact a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel.
- Notes to Physician:** Provide general supportive measures and treat symptomatically. In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. If burn is present, treat as any thermal burn.

****If victims of chemical over-exposure are taken for medical attention, give a copy of the label or MSDS to the physician/health professional.****

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Section 5. Fire-Fighting Measures
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- Extinguishing Media:** If solid resin burns, use carbon dioxide, dry chemical, or water.
- General Fire Hazards:** This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.
- NFPA Hazard Ratings:** 1 Health 0 Fire 0 Reactivity
- Hazardous Decomposition Products:** Solution will boil and primarily emit steam until solid resin remains. If solid resin burns, smoke, carbon monoxide, carbon dioxide, trace oxides of nitrogen and sulfur may be released.
- Fire Fighting Equipment:** Wear full protective clothing, including self-contained positive pressure or pressure demand breathing apparatus, helmet, protective clothing and face mask.

Section 6. Accidental Release Measures

- Containment:** Contain the discharged material. Do not allow product to enter public drainage systems or open water courses.
- Clean-up Procedures:** Wear appropriate protective equipment and clothing during clean up. Absorb spill with inert material. In a clean area, dike and recover for reuse. Dispose of contaminated material. Thoroughly wash spill area with water after clean up. Follow all Local, State, Federal and Provincial regulations for disposal.
- Evacuation Procedures:** Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.
- Special Instructions:** Avoid contact with skin and eyes. Remove soiled clothing and launder before reuse.

Section 7. Handling and Storage

- Handling:** Use adequate ventilation. Do not breathe vapors or fumes. Do not allow product to come into contact with skin or eyes. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.
- Storage:** Store at ambient temperature and atmospheric pressure. Do not allow product to freeze. When frozen, the product may separate and must be redispersed before use. Store above 40°F. Avoid high temperatures (>50°C). Store in air-tight containers with a moist overhead.

Section 8. Exposure Controls/Personal Protection

Exposure limits for products and components not established.

Engineering Controls: Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use local and general exhaust ventilation to effectively remove and prevent buildup of mist/vapors/fumes generated from handling this product.

Personal Protection

- Eye/Face:** Wear chemical goggles and face shield if splashing is possible. Ensure compliance with OSHA's personal protective equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.
- Skin:** Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. For heated product, use any type thermal insulating gloves and other clothing as necessary to protect

from thermal burns. Ensure compliance with OSHA's personal protective equipment (PPE) standard, 29 CFR 1910.132 (general) and 138 (hand protection).

Respiratory: GAS/VAPOR: Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit-testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented. For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-face piece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in Publication No. 87-116 or ANSI Z88.2-1992. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

General: Use good industrial hygiene practices in handling this material. Eye wash fountains and emergency showers are recommended. Launder contaminated clothing before reuse.

Section 9. Physical and Chemical Properties

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| Appearance: | Milky white liquid |
| Odor: | Mild |
| Odor Threshold: | Not applicable |
| pH: | 8.8-9.5 |
| Melting point/freezing point: | 0°C (32°F) (water) freezing point |
| Initial boiling point and boiling range: | 100°C (water) |
| Flash Point: | >93.49°C (201°F) (Setaflash Open Cup) |
| Evaporation rate: | 0.33 (n-BuAc=1) (water) |
| Flammability: | Non-flammable |
| Upper/lower flammability or explosive limits: | Not available |
| Vapor pressure: | 24 mm Hg at 25°C (77°F) (water) |
| Vapor density: | 0.6 (water) (Air = 1) |
| Volatiles: | 40% (water), <0.5% (estimated) |
| Specific gravity: | >1.0 at 25°C/25°C (water=1.00) |
| Solubility (water): | Dilutable |
| Partition coefficient, n-octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |
| Molecular weight: | Not available |
| Acid Number: | Not available |

Section 10. Stability and Reactivity Data

Chemical Stability: This product is stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid strong oxidizing agents. Do not freeze. When frozen the product may separate and must be redispersed before use.

Incompatibility: This product may react with strong oxidizing agents.

Hazardous Decomposition Products: Solution will boil and primarily emit steam until solid resin remains. If solid resin burns, smoke with carbon monoxide, carbon dioxide, trace oxides of nitrogen and sulfur may be released.

Section 11. Toxicological Information

Toxicity Data (for rosin ester component):

Acute Toxicity: Oral, rat, LD₅₀ >5000 to >10,000 mg/kg

Skin Corrosion/Irritation: Not found to be a skin irritant in rabbits

Eye Irritation: Not found to be an eye irritant in rabbits

Sensitization: Not found to be a skin sensitizer in the Guinea Pig Maximization Test (GPMT).

Germ Cell Mutagenicity: Non mutagenic in the AMES Salmonella Assay. Not clastogenic in cytogenetic test conducted in Chinese Hamster Ovary (CHO) cells. Negative in a DNA damage and repair, unscheduled DNA synthesis test in rat hepatocytes.

Carcinogenicity: This product is not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP or OSHA. Chemically similar substance has been tested for potential carcinogenicity in a two year bioassay conducted in rats in which there was no evidence of carcinogenicity.

Reproductive Toxicity: No data available. A chemically similar substance showed no obvious effects of treatment at any dose level in a Reproduction/Developmental Toxicity Screening Test in rats; Parental NOEL = 1900 mg/kg/day; Reproductive/Developmental NOEL = 1900 mg/kg/day.

Repeat Dose Toxicity: NOEL = 100 to 1000 mg/kg/day in rats in several 90-day feeding studies.

Specific Target Organ System Toxicity

– **Single Exposure:** No data available

Specific Target Organ System Toxicity

– **Repeated Exposure:** See above

Other: No data available

Section 12. Ecological Information

Ecotoxicity (for substance chemically similar to rosin ester component):

Acute Toxicity, Fish: 96-hr LL₅₀ >1000 mg/l loading rate WAF; NOEL 1000 mg/l loading rate WAF
 Acute Toxicity, Daphnia: 48-hr EL₅₀ >1000 mg/l loading rate WAF; NOEL 1000 mg/l loading rate WAF
 Growth Inhibition, Algae: 72-hr EL₅₀ for AUC and Average Specific Growth Rate (0-72H) >1000 mg/l loading rate WAF, NOEL 1000 mg/l loading rate WAF

Biodegradability: 0 % degradation after 28 days, not readily biodegradable (for Rosin ester component)

Bioaccumulative Potential: Partition Coefficient (LogK_{ow}) >1.5 at pH 7.5 and pH 2 (for Rosin ester component)

Other: Based on the pH of this product, it is unlikely that a spill would be harmful to aquatic organisms. However, large spills or concentrated discharges of this product into water may result in suspended or settleable solids which lower the dissolved oxygen content of the water body. Sedimentation to the bottom of a body of water may result in detrimental effects to fish life by reducing their growth rate, preventing the successful development of fish eggs and larvae, or reducing the abundance of food available to the fish.

Section 13. Disposal Considerations

Waste Disposal Waste material must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous waste. No EPA Waste Numbers are applicable for this product's components. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Write to the address listed in Section 1 for information on heavy metals analysis and other disposal information.

Section 14. Transport Information

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| DOT Classification: | Not a DOT controlled material. |
| DOT Proper Shipping Name: | None |
| DOT Identification Number: | None |
| Packing Group: | None |
| Hazardous Substances | |
| Reportable Quantity: | None |
| Special Provisions for Transport: | No additional information |
| Additional Shipping Information: | Not additional information |
| International Transportation | |
| Regulations: | Not classified |

Section 15. Regulatory Information

TSCA: The components of this product are on the Toxic Substances Control Act (TSCA) Inventory.

SARA TITLE III:

SARA 302 (40 CFR 355): None of this product's components are listed.

SARA 311/312 (40 CFR 370.2): None.

SARA 313 (40 CFR 372.65): None of this product's components are listed.

CERCLA (40 CFR 302.4): None of this product's components are listed.

International Inventories: This product is either listed or exempt from listing on the following inventories: Canada DSL, Europe EINECS, Korea ECL, and Australia AICS.

State Lists: Contains trace amounts of several components listed in FL, MA, MN, NJ or PA.

Section 16. Other Information

Validation Date: March 11, 2010

Supersedes Date: November 21, 2008

Reason for Revision: Revised Sections 2 and 11.

Validated By: L.M. Krzywanska, Product Regulatory Technologist

Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists. ANSI = American National Standards Institute. ASTM = American Society for Testing and Materials. AUC = Area Under Curve. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. DOT = Department of Transportation. EL = Effective Loading. EPA = Environmental Protection Agency. GHS = Globally Harmonized System of Classification and Labeling of Chemicals. IARC = International Agency for Research on Cancer. LD = Lethal Dose. LL = Lethal Loading. NIOSH = National Institute of Occupational Health and Safety. NOEL = No Observed Effect level. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. PEL = Permissible Exposure Limit. SARA = Superfund Amendments and Reauthorization Act. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act. WAF = Water Accommodated Fractions.

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