



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product/Trade Name	AQUATAC® 9041	Code	AQ9041
		MSDS#	5051
		Validation Date	11/01/2001
Supplier / Manufacturer	Arizona Chemical P.O. Box 550850 Jacksonville, FL 32255-0850 USA (800) 526-5294 / (904) 928-8700	Print Date	11/01/2001
		EMERGENCY PHONE CHEMTREC: 1-800-424-9300 (transportation and medical)	
Chemical Name	Modified Rosin Ester Dispersion		

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight
1) Rosin Ester	Proprietary, NJTSRN-5051	90
2) N,N-Dimethylethanolamine	108-01-0	5-6
3) Water	7732-18-5	4-5

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

Section 3. Hazards Identification

EMERGENCY OVERVIEW

Product is a pale brown, highly viscous liquid with a slight amine odor. Product is irritating to eyes and skin. Irritation may be severe. May be harmful if absorbed through skin. May be harmful if swallowed. Inhalation of mists/vapors/fumes may cause respiratory irritation with throat discomfort, coughing or difficulty breathing.

HMIS

HEALTH: * 2
FIRE: 1
REACTIVITY: 0
PPE: see Section 8 of this MSDS.

0=Minimal; 1=Slight; 2=Moderate;
3=Serious; 4=Severe;
(*)=Chronic health hazard.

Potential Health Effects

Eye Contact	Liquid or vapors are irritating to the eyes. Irritation may be severe. If heated product contacts the eye, thermal burns may result.
Skin Contact	Product is irritating to skin. Irritation may be severe. A component of this product may be absorbed through skin. Prolonged or repeated skin contact may cause irritation and burning. When it is heated, this product may cause thermal burns.
Inhalation	May be harmful if inhaled. Vapors may be irritating. Inhalation of mists/vapors/fumes generated by heating this product may cause respiratory irritation and burning with throat discomfort, coughing and difficulty breathing. A component of this product may cause respiratory sensitization. Repeated or prolonged inhalation of vapors/fumes generated by heating this product may lead to respiratory sensitization reactions, producing an asthma-like condition.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, including burning, nausea, vomiting and diarrhea.

Section 4. First Aid Measures

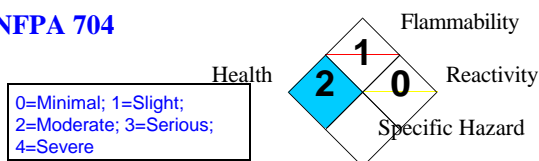
Eye Contact	Immediately flush eyes with flooding amounts of cool, low pressure water for at least 15 minutes. If irritation persists, get medical attention.
Skin Contact	In case of skin contact, wash immediately with soap and water. If irritation develops or persists, get medical attention. Launder contaminated 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.

Section 5. Fire and Explosion Data

Flammability of the Product	Nonflammable.
Auto-Ignition Temperature	Not applicable.
Flash Point	114.44°C (238°F), (Setaflash Closed Cup)
Flammable Limits	Not applicable.
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.
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.
Extinguishing Media	If solid resin burns, use carbon dioxide, dry chemical or water.
Fire Fighting Equipment and Instructions	Wear full protective clothing, including self-contained positive pressure or pressure demand breathing apparatus, helmet, protective clothing and face mask.

NFPA 704



This information is for people trained in the National Fire Protection Association's (NFPA 704) Identification of the Fire Hazards of Materials.

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. Do not allow eye, skin contact and inhalation of vapors during clean-up. Absorb spill with inert material. Shovel material into appropriate container for disposal. 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	Do not breathe vapors or mists. 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. Store above 40°F.

Section 8. Exposure Controls/Personal Protection

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 mists/vapors/fumes generated from the handling of 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/molten 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 1901.134) 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 50 times these limits, a NIOSH approved full-facepiece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 50 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.

Chemical Name or Product Name	CAS #	OSHA PEL	ACGIH TLV
1) Rosin Ester	Proprietary, NJTSRN-5051	Not established	Not established
2) N,N-Dimethylethanolamine	108-01-0	Not established	Not established
3) Water	7732-18-5	Not established	Not established

NOTE: The 1989 OSHA PELs were vacated in 1993 and are not currently enforceable by Federal OSHA. However, some state OSHA programs may still enforce the 1989 limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid. (Viscous liquid.)	Vapor Density	Not applicable
Odor	Amine like. (Slight.)	Percent Volatile (EPA Method 24)	~ 4.2
Color	Brown. (Light.)	Solubility (water)	Dilutable.
Molecular Weight	629	Density (vs. water)	Not available.
Specific Gravity	~ 1.04	Flash Point	114.44°C (238°F), (Setaflash Closed Cup)
Boiling Point	100°C (212°F)	R/B Softening Point	Not applicable.
pH	9 [Basic.]	Acid No. (per ASTM D-465)	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions to avoid	Avoid strong oxidizing agents. Do not freeze.
Incompatibility	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.
Hazardous Polymerization	Hazardous polymerization will not occur.

Section 11. Toxicological Information

Toxicity to Animals	<p>No data is available for the product as a whole, however information on a component(s) is as follows:</p> <p>Rosin Ester: ORAL, rat: LD50 = > 5000 mg/kg to > 10,000 mg/kg; DERMAL, rabbit: LD50 = >5000 mg/kg.</p> <p>In laboratory tests, rabbits exhibited mild eye irritation that was reversible after 72 hours when product was administered into the eyes. Skin irritation study in rabbits showed minimal to mild irritation. Product was not found to be a skin sensitizer in guinea pigs. Product was non-mutagenic in the Ames Salmonella Assay.</p> <p>N,N-Dimethylethanolamine: ORAL, rat, LD50 = 2340 mg/kg DERMAL, rabbit, LD50 = 1370 mg/kg</p> <p>This component was found to be a severe eye irritant and a mild skin irritant in rabbits. Component was non-mutagenic in the Ames Salmonella Assay.</p>
Toxicity to Humans	<p>Contact may cause severe skin or eye irritation. A component of this product (N,N-Dimethylaminoethanol) may be absorbed through skin. May be harmful if inhaled. Vapors may be irritating. Inhalation of mists/vapors/fumes generated by heating this product may cause respiratory irritation and burning with throat discomfort, coughing, and difficulty breathing. May be harmful if swallowed. Ingestion may cause nausea, vomiting, and diarrhea.</p> <p>A component of this product, N,N-Dimethylaminoethanol under laboratory conditions produced asthmatic responses using a 2% solution. Repeated or prolonged inhalation of vapors/fumes generated by heating this product may lead to respiratory sensitization reactions, producing an asthma-like condition.</p> <p>CARCINOGENIC EFFECTS: None of this product's components are listed as carcinogens by ACGIH, IARC, NIOSH, NTP or OSHA. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. No information available on the toxicity of this product to the reproductive system.</p>

Section 12. Ecological Information

Ecotoxicity	The pH range of 5-9 is unlikely to be harmful to any species. However, large spills or concentrated discharges of this product to 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.
Environmental Fate	No information is available.

Section 13. Disposal Considerations

Waste Disposal	Wastes 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

DOT Classification Not a DOT controlled material (United States).

Proper Shipping Name None.

DOT Identification Number None.

Packing Group None.

Hazardous Substances Reportable Quantity Not available.

Special Provisions for Transport No additional information.

Additional Shipping Information Not Determined

International Transportation Regulations Not Determined

Section 15. Regulatory Information

Federal and State Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

SARA TITLE III:

SARA Section 302 (40 CFR 355 Appendix A): **None of this product's components are listed;**

SARA Section 311/312: **Immediate (Acute) Health Hazard;**

SARA Section 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.**

TSCA Inventory: All of this product's components are listed.

International Inventories: All of this product's components are on or exempt from these inventories: Canada DSL, EINECS, Japan, Korea, Australia and the Philippines.

The following components are on the State of Massachusetts Right to Know List: **N,N-Dimethylethanolamine**

The following components are on the State of Pennsylvania Right to Know List: **N,N-Dimethylethanolamine**

The following components are on the State of Florida Hazardous Substances List:
N,N-Dimethylethanolamine

The following components are on the State of New Jersey Right to Know List: **N,N-Dimethylethanolamine**

This product does not contain any chemicals currently on the California List of Known Carcinogens and Reproductive Toxins.

Section 16. Other Information

Key/Legend ACGIH = American Conference of Governmental Industrial Hygienists. ANSI = American National Standards Institute. ASTM = American Society for Testing and Materials. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. DOT = Department of Transportation. EPA = Environmental Protection Agency. IARC = International Agency for Research on Cancer. LD = Lethal Dose. NIOSH = National Institute of Occupational Health and Safety. 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.

Validated by Richard Moye on 11/01/2001.

Verified by Regulatory Affairs Dept..

Printed 11/01/2001.

Supersedes Date 05/01/98 **Reason for Revision** Updated Section 15.

Notice to Reader

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.