

**ERGON ASPHALT AND EMULSIONS, INC.
MATERIAL SAFETY DATA SHEET**

DAT C-5 (c)

MSDS No. AE060

Date of Preparation: **August 11, 2008**

Revision No. 0

Section 1 – Chemical Product and Company Information

Product/Chemical Name:	DAT C-5 (c)
Chemical Formula:	Mixture
CAS Number:	Mixture
Other Designations:	
General Use:	Asphalt Paving Additive
Manufacturer:	ERGON Asphalt & Emulsions, Inc.; P O Box 1639; Jackson MS 39215-1639; Phone 601-933-3000; Hours of Operation 8:00 am – 5:00 pm; ERGON 24 Hour Emergency Phone Number 1-800-222-7122; CHEMTREC 1-800-424-9300.

Section 2 – Composition / Information on Ingredients

Ingredient Name	CAS Number	% Vol
Hydrochloric Acid	1310-73-2	5-10
Fatty Amine derivatives	proprietary	5-20
Water	7732-18-5	70-90

INGREDIENT	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Hydrochloric Acid	None estab.	5 ppm (ceiling)	None estab.	2 ppm (ceiling)	None estab.	5 ppm (ceiling)	50 ppm
Fatty Amine derivatives	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Water	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.

Section 3 – Hazards Information

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS

Primary Entry Routes: Eye contact, inhalation, and ingestion.

Target Organs: Eyes, skin, and digestive tract.

Acute Effects

Inhalation: Severe irritant. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Eye: Corrosive. Causes irritation of eyes, and with greater exposures can cause burns that may result in permanent impairment of vision, even blindness.

Skin: Corrosive. Contact with skin can cause irritation or severe burns and scarring with greater exposures.

Ingestion: Corrosive. Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.

Carcinogenicity: IARC, NTP, and OSHA do not list this product as carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: Persons with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of the substance.

Chronic Effects: Prolonged contact with dilute hydrochloric acid solutions or dust has a destructive effect upon tissue.

HMIS H-1 F-0 R-0 PPE* * Sec.8
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Section 4 – First Aid Measures

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Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.
Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Seek medical attention if needed.
Ingestion: Do not induce vomiting and seek medical help.
After first aid, get appropriate in-plant paramedic or community medical support.
Special Precautions/Procedures:
Note to Physician:
General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable
Flash Point Method: Not Applicable
Auto Ignition Temperature: Not Applicable
LEL: Not Applicable
UEL: Not Applicable
Flammability Classification: Not Applicable
Extinguishing Media: Use extinguishing media suitable for the surrounding fire. Neutralize with soda ash or slaked lime.
Unusual Fire or Explosion Hazards: None.
Hazardous Combustion Products: Carbon monoxide, carbon dioxide, toxic hydrogen chloride gas and sulfur dioxide.
Fire-Fighting Instructions: None
Fire-Fighting Equipment: Use self-contained breathing apparatus in enclosed areas where heavy smoke may occur.



Section 6 – Accidental Release Matters

Spill/Leak Procedures: Stop spill at source. Confine spill by diking or impoundment. Clean-up spill but avoid flushing to sewer or surface water.
Small Spills: Stop spill at source if possible. Add absorbent or soil and place in sealable liquid-proof container for disposal.
Large Spills:
Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Cleanup: Mix with inert absorbent material such as soil, sand, or vermiculite to stabilize and place in container for disposal according to local regulations. Do not use sawdust.
Regulatory Requirements: Notify local health and pollution control agencies as appropriate. Follow applicable OSHA regulations (29 CFR 1900.120). This material is not a hazardous waste as defined in RCRA. For disposal follow all federal, state, and local regulations.

Section 7 – Handling and Storage

Handling Precautions: Avoid contact with skin and eyes. Wash thoroughly after handling.
Storage Requirements: Store in closed container in a cool, well-ventilated area.
Regulatory Requirements: None known.

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Section 8 – Exposure Controls / Personal Protection

Engineering Controls: Not applicable.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. If respirators are used, OSHA requires a written respiratory protection program that includes: procedures for selecting respirators; medical evaluation; fit testing; use in routine and emergency situations; cleaning, disinfecting, storing, inspecting, repairing, discarding and maintaining respirators; adequate air quality, quantity and flow; training in respiratory hazards; training in use of respirators; evaluation of effectiveness of respiratory program.

Protective Clothing/Equipment: Wear protective gloves, boots, aprons, and gauntlets as needed to prevent prolonged or repeated skin contact. Goggles and face shields should be used in areas where splashing may occur. Wear protective eyeglasses or safety goggles per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, or smoking.

Section 9 – Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Amber liquid with a bland odor

Odor Threshold:

Vapor Pressure: <1 mm Hg at 70°F (20°C)

Vapor Density (Air = 1): >1

Formula Weight: No data

Density: 8.4 – 8.8 lb/gal

Specific Gravity (H₂O = 1, at 4EC): 1.023

pH: 1.5 to 3.0

Water Solubility: Slightly soluble.

Other Solubilities: No data.

Boiling Point: >212°F (100°C)

Freezing/Melting Point: No data.

Viscosity: No data.

Refractive Index: No data.

Surface Tension: No data.

% Volatile: 0%

Evaporation Rate: <1

Section 10 – Stability and Reactivity

Stability: Stable under normal conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: A strong mineral acid, concentrated hydrochloric acid is highly reactive with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.

Conditions to Avoid: Do not overheat product.

Hazardous Decomposition Products: When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.

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Section 11 – Toxicological Information

<p>Eye Effects: Causes irritation of eyes. Acute Inhalation Effects: No data. Carcinogenicity: Not a known human carcinogen. Teratogenicity: No data. Chronic Effects: Prolonged contact with dilute hydrochloric acid solutions or dust has a destructive effect upon tissue.</p>	<p>Skin Effects: Causes irritation of skin. Acute Oral Effects: rabbit LDLO: 500mg/kg. Tests on laboratory animals indicate material may produce adverse mutagenic effects Mutagenicity: No data.</p>
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Section 12 – Ecological Information

Ecotoxicity: No data.
Environmental Fate:
 Environmental Transport: No data.
 Environmental Degradation: No data.
 Soil Absorption/Mobility: No data.

Section 13 – Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.
Disposal Regulatory Requirements: Waste material should not be a hazardous waste under RCRA guidelines. Follow Federal, state, and local regulations for disposal of solid waste.
Container Cleaning and Disposal: Follow Federal, state, and local regulations for disposal of the waste material and containers, regardless of waste classification.

Section 14 – Transport Information

<p>Shipping Name: Hydrochloric Acid, solution (Hydrochloric Acid) Shipping Symbols: NA Hazard Class: 8, Corrosive Liquid ID No.: UN1789 Packing Group: II Label: 8 Special Provisions (172.102): NA</p>	<p>Packaging Authorizations: a) Exceptions: NA b) Non-bulk Packaging: NA c) Bulk Packaging: NA</p>	<p>Quantity Limitations: a) Passenger, Aircraft, or Railcar: NA b) Cargo Aircraft Only: NA Vessel Stowage Requirements: a) Vessel Stowage: NA b) Other: NA</p>
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Section 15 – Regulatory Information

EPA Regulations:
RCRA
 RCRA Hazardous Waste Number: Not listed.
 RCRA Hazardous Waste Classification (40 CFR 261): Non-hazardous.
CERCLA
 CERCLA: Not listed.
 CERCLA Reportable Quantity (RQ): Hydrochloric Acid 5,000 lbs.
SARA
 Hydrochloric Acid listed as hazardous chemical.
 SARA 311/312 Codes: Fatty amine derivative is listed as immediate (acute) health hazard.
 SARA Toxic Chemical: Not listed.
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.
OSHA Regulations:
 OSHA Specifically Regulated Substance: No
State Regulations: Hydrochloric Acid listed in PA, MA, and NJ hazardous substance (RTK) lists.

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Section 16 – Other Information

Prepared By: Mary E. Snow

Revision Notes:

Additional Hazard Rating Systems: NAS Hazard Rating for Bulk Water Transportation of asphalt:
Fire – 1, Health – 0, Water Pollution – 0, Reactivity -0.

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