

**MATERIAL SAFETY DATA SHEET****3101****SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION**

MSDS REC'D by Trane February 28, 2001

Product Name: ServiceFirst Fin Protectant (Aerosol)

Date Prepared Feb. 28, 2001

Product Number(s): CHM00055

Replaces Jul. 08, 1997

Product Use: Metal Coating

Company Name: North American Research Corporation  
P.O. Box 1318  
Lewisville, TX 75067

Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755

Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)

**SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS**

OSHA Hazardous Components (29 CFR 1910.1200):

	CAS Registry No.	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Toluene	108-88-3	200 ppm	50 ppm	300 ppm C(OSHA)	> 60
L.P.G. (propellant)	68476-85-7	1000 ppm	1000 ppm	None known	10-20
Benzene	71-43-2	1 ppm	0.5 ppm	2.5 ppm STEL (ACGIH)	0-300 ppm

**SECTION 3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW:**

DANGER: EXTREMELY FLAMMABLE. VAPOR HARMFUL. CONTENTS UNDER PRESSURE. KEEP OUT OF REACH OF CHILDREN. FOR PROFESSIONAL USE ONLY

**PRIMARY ROUTES OF EXPOSURE:**

Inhalation, Eye Contact, Skin Contact, Dermal Absorption

**POTENTIAL HEALTH EFFECTS**

EYE CONTACT: Severe irritation; corneal clouding.

SKIN CONTACT: Moderate skin irritation; defatting and drying of the skin which can lead to irritation and dermatitis.

INHALATION: Irritation of the nose, throat, and lungs; headache, nausea, vomiting, dizziness, drowsiness, fatigue, loss of coordination, unconsciousness. Inhalation of high solvent vapor or mist concentrations can cause coma or death.

INGESTION: Possibly harmful if swallowed. Can cause gastrointestinal irritation, nausea, vomiting, or diarrhea.

DELAYED EFFECTS: Prolonged or repeated overexposure to solvents can cause irritation to the respiratory tract, enlarged liver, kidney effects, cardiac sensitization.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

**SECTION 4 FIRST-AID MEASURES****EYE CONTACT:**

Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. Get medical attention immediately.

**SKIN CONTACT:**

Remove contaminated clothing. Wash contact area with soap and water. Get prompt medical attention. Launder clothing before reuse.

**INHALATION:**

Move person to fresh air. If breathing is difficult, give oxygen by trained personnel. If breathing stops, administer artificial respiration. Get medical attention immediately.

**INGESTION:**

If swallowed, DO NOT induce vomiting. Give 2 glasses of water or milk. Careful gastric lavage may be indicated. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**SECTION 5 FIRE-FIGHTING MEASURES**

FLASHPOINT: 45°F METHOD: PMCC

FLAMMABLE LIMITS: LEL: 1.2 (estimate) UEL: 7.1 (estimate)

AUTOIGNITION TEMP: 896°F (estimate)

**FIRE EXTINGUISHING MEDIA:**

Polar solvent (alcohol) foam, carbon dioxide, water spray, dry chemical. Use water spray to cool containers exposed to fire.

**UNUSUAL HAZARDS:**

Vapors can travel to a source of ignition and flash back. Heated material can form flammable or explosive vapors with air.  
Toxic fumes are generated when material is exposed to fire or fire conditions.

**PERSONAL PROTECTIVE EQUIPMENT:**

As in any fire, wear full protective clothing and NIOSH approved, self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

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**SECTION 6 ACCIDENTAL RELEASE MEASURES**

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**PERSONAL PROTECTION:**

Appropriate protective equipment must be worn when handling a spill of this material. See section 8 for recommendations.

**PROCEDURES:**

Evacuate spill area. Eliminate all ignition sources. Floor may be slippery. Ventilate the spill area. Avoid breathing vapor. Contain spill immediately with inert materials (sand, earth). Transfer liquids and solid dike material to separate suitable containers for recovery or disposal. CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. NOTE: Spills on porous surfaces can contaminate groundwater.

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**SECTION 7 STORAGE AND HANDLING**

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**STORAGE CONDITIONS:**

**DANGER: CONTENTS UNDER PRESSURE.** This product is packaged in pressurized aerosol cans. Do not puncture or incinerate container.

Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Store away from excessive heat (e.g. steampipes, radiators), from sources of ignition and from reactive materials. Ground all metal containers during storage and handling. The minimum recommended storage temperature for this material is -18°C/0°F. The maximum recommended storage temperature for this material is 49°C/120°F.

**HANDLING PROCEDURES:**

Monomer vapors can be evolved when material is heated during processing operations. See Section 8 for types of ventilation required. Ground all containers when transferring material.

**OTHER:**

**CONTAINERS HAZARDOUS WHEN EMPTY.** Since emptied containers retain product residue (vapors and/or liquid) follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind or weld on or near container.

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**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**EXPOSURE LIMITS:** See section 2.**RESPIRATORY PROTECTION:**

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the TWA/TLV's listed. Wear NIOSH/MSHA approved respirator where required.

**EYE PROTECTION:**

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

**HAND PROTECTION:**

Wear impervious protective gloves. Gloves made of polyvinyl alcohol or Viton are good suggestions. Check with the glove manufacturer for specific chemical resistance.

**OTHER PROTECTION:**

Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

**ENGINEERING CONTROLS (Ventilation):**

Use in a well ventilated area. Do not use in confined spaces. Local, mechanical exhaust may be necessary.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE AND ODOR:** Clear liquid, blue tint. Aromatic solvent odor.

**SPECIFIC GRAVITY:** 0.9

**VAPOR PRESSURE:** 22 mm Hg @ 20°C/68°F Toluene

**VAPOR DENSITY:** 3.6 Toluene

**SOLUBILITY IN WATER:** Practically insoluble

**pH:** Not applicable

**BOILING POINT:** 230°F/110°C (Approximate)

**FREEZING / MELTING POINT:** Not determined

**EVAPORATION RATE (Butyl Acetate = 1):** > 1

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**SECTION 10 STABILITY AND REACTIVITY**

STABILITY: Stable

CONDITIONS TO AVOID: Ignition sources (sparks, open flame, heated surfaces).

INCOMPATIBILITY (Materials to Avoid): Oxidizing materials.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield acrylic monomers.

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**SECTION 11 TOXICOLOGICAL INFORMATION**

ACUTE DATA:

Toluene (108-88-3): Oral LD50 – rat: >5000 mg/kg, Dermal LD50 – rabbit: >3000 mg/kg, Eye Irritation – rabbit: severe irritation, Skin Irritation – rabbit: moderate irritation, Inhalation LC<sub>50</sub> – rat: 4000 ppm for 4 hr.

REPRODUCTIVE/TERATOLOGY DATA:

Toluene (108-88-3) has demonstrated to be embryofetotoxic and teratogenic in laboratory animals.

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**SECTION 12 ECOLOGICAL INFORMATION**

No information available.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Dispose of container and unused contents in accordance with federal, state, and local regulations.

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**SECTION 14 TRANSPORT INFORMATION**

U.S. Department of Transportation:

Consumer Commodity ORM-D — Domestic U.S., ground shipments only  
Aerosols, flammable, (each not exceeding 1 L capacity), 2.1, UN1950

**SECTION 15 REGULATORY INFORMATION**

TSCA: All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA: Toluene (108-88-3); RQ 1000 lbs.

SARA TITLE III:

Section 311/312 Hazard Category: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactive Hazard: No

Section 313 Reportable Ingredients: Toluene (108-88-3)

CALIFORNIA (Proposition 65):

This product contains a component or components known to the state of California to cause birth defects or other reproductive harm: Toluene (108-88-3)

This product contains trace levels of a component or components known to the state of California to cause cancer: Benzene (71-43-2)

**SECTION 16 OTHER INFORMATION**

NFPA RATING: Health – 2, Flammability – 3, Reactivity – 0

HMIS® RATING: Health – 2, Flammability – 3, Reactivity – 0

HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA). HMIS® materials may be purchased exclusively from Labelmaster, 1-800-621-5808.

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