

# MATERIAL SAFETY DATA SHEET

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## SECTION 1. PRODUCT AND COMPANY INFORMATION

**Product Name:** Galvax (aerosol) CAS Number: N/A Hazard Rating: Health: 0 Fire: 0 Reactivity: 0 PPI:  
**Company Identification:** Alvin Products, Inc., 350 Merrimack St., Lawrence, MA 01843-1748  
**Information Telephone:** (978) 975-4580 FAX: (978) 975-2621  
**Product Class:** INDUSTRIAL AEROSOL COATING  
**Trade Name:** Galvax (aerosol) **Product Code:** 50101 **MSDS Revision Date:** March-07-2002

## SECTION 2. INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
*ZINC DUST	7440-66-6	35.22	Y
DIMETHYL ETHER	115-10-6	25.16	Y
ACETONE	67-64-1	15.09	Y
*METHYL ETHYL KETONE (HAPS)	78-93-3	5.03	Y
TOLUENE (HAPS)	108-88-3	5.03	Y
VM&P	64742-89-8	5.03	Y
XYLENE (HAPS)	1330-20-7	5.03	Y
MINERAL SPIRITS	8052-41-3	1.62	Y

\*\*\* ALL Ingredients in this product are listed in the T.S.C.A. Inventory

\*\* SPECIAL REMARKS ON ABOVE LISTED INGREDIENTS \*\*

Technical grade xylene contains 18-20% ethyl benzene CAS # is 100-41-4 and is subject to reporting requirements of SECTION 313 of SARA TITLE III. ACGIH recommends a TWA of 50 ppm for toluene (skin). VM&P (typical benzene content, estimated): <0.1% by weight. VM&P also contains 4% toluene, 8% xylene, 3% ethyl benzene. *SPECIAL REMARKS SPECIFIC TO THIS RAW MATERIAL*

\*REPORTABLE QUANTITY SARA III

## SECTION 3. PHYSICAL DATA

<b>pH Value:</b>	Not Applicable	<b>Partition Coefficient:</b>	Not Available
<b>Boiling Range:</b>	0.?F - 315.?F	<b>% Volatile Weight:</b>	60.5%
<b>Melting Point:</b>	Not Applicable	<b>% Volatile:</b>	82.8%
<b>Evaporation Rate:</b>	1.472 times faster than n-Butyl Acetate	<b>Specific Gravity:</b>	1.399
<b>Vapor Density:</b>	Heavier than air	<b>Weight/Gallon:</b>	11.65 lbs
<b>VOC</b>	7.62 LBS/GAL	<b>Heavy Elements (ppm)</b>	0.

## SECTION 4. FIRE AND EXPLOSION HAZARD DATA

**Flammability Class:** IA  
**Flash Range:** -42.?F - 105.?F  
**Explosive Range:** 0.5% - 26.7%

**EXTINGUISHING MEDIA:** Foam, alcohol foam, CO<sub>2</sub>, dry chemical, and water fog may be ineffective but should be used to cool fire exposed containers to prevent pressure build up and possible auto-ignition or explosion when exposed to extreme heat.

**SPECIAL FIREFIGHTING PROCEDURES:** Use full protection equipment including self contained breathing apparatus for respiratory protection in fighting fires in enclosed or confined spaces, or as otherwise needed. Minimize breathing gases, vapors fumes or decomposition products. After the organic material has burned, zinc particles suspended in the air may form an explosive mixture; avoid any disturbance which could cause a dust cloud, such as gas-propelled fire extinguishers, in the burning material. Direct the CLASS B extinguishing agent, such as dry chemicals, above the fire to rain down on the burning material. Care should be taken when applying a CLASS B extinguishing agent because some agents can accelerate a fire when most of the organics have been consumed. The metal will glow bright if burning, if this happens isolate the fire with dry inert granular material or CLASS D extinguishing agent then leave it alone. Allow material to become cool before disposal.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** During emergency conditions, over-exposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

## SECTION 5. HEALTH HAZARD DATA

	Route	Species	Exposure and Dose
*ZINC DUST	Inhalation	Unknown	LD50 124. PPM
DIMETHYL ETHER	Inhalation	Unknown	LC50 386. PPM
TOLUENE (HAPS)	Inhalation	Unknown	LD50 8000. PPM
“	Oral	Unknown	LD50 5. PPM
“	Skin	Unknown	LD50 14. PPM
MINERAL SPIRITS	Inhalation	Unknown	LC50 99. PPM
“	Oral	Unknown	LD50 5. PPM
“	Skin	Unknown	LD50 3.16 PPM

**PERMISSIBLE EXPOSURE LEVEL:** SEE SECTION VIII

**EFFECTS OF OVEREXPOSURE:** High vapor concentrations (> approx. 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and have other central nervous system effects.

**PRIMARY ROUTE(S) OF ENTRY:** (X) Dermal (X) Inhalation ( ) Ingestion

MEK has been shown to cause harm to fetus in laboratory animal studies, the relevance of these findings to humans is uncertain. Chronic effects of VM&P: VM&P contains n-hexane. Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs. Simultaneous exposure to the vapors of n-hexane and methyl ethyl ketone or methyl isobutyl ketone above the recommended workplace limits increases the risk of adverse effects from n-hexane.

**EMERGENCY AND FIRST AID PROCEDURES:**

Eyes - flush thoroughly with running water for 15 minutes, including under eyelids. Get medical attention.

Skin - promptly remove contaminated clothing and wash affected areas thoroughly with soap and water. If irritation occurs get medical attention. Wash contaminated clothing thoroughly before re-use.

Inhalation - if overcome by vapor, remove to an area free from risk of further exposure and call a physician immediately. Administer oxygen or artificial respiration as needed.

Ingestion - do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention immediately.

**MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:** Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product. Toluene may be harmful to the fetus based on laboratory animal studies. Repeated exposure to toluene has been associated with high frequency hearing loss based on evidence in laboratory animals. The human health consequences of this finding are uncertain. Chronic overexposure to xylene has been suggested to cause cardiac abnormality in humans.

**SECTION 6. STABILITY AND REACTIVITY MEASURES**

**Stability:** This product is stable

**Hazardous Polymerization:** Hazardous polymerization will not occur

**INCOMPATIBILITY:** Avoid contact with strong oxidizing agents, such as liquid chlorine, concentrated oxygen, or sodium hypochlorite.

**CONDITIONS TO AVOID:** Avoid heat, open flames.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and unidentified organics may be formed.

**SECTION 7. SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Before attempting cleanup, refer to hazard caution information in other sections of this sheet. **LARGE SPILLS** - notify safety personnel. Eliminate potential sources of ignition. Wear appropriate respirator and protective clothing. Soak up with absorbent such as sand, clay, or other suitable material. Place in non-leaking containers and seal tightly for proper disposal. Ventilate confined spaces. Minimize breathing vapors. Open all windows and doors. Minimize

skin contact. Keep product out of sewers and watercourses by diking and impounding. Observe precautions for volatile, combustible vapors

from absorbed material. **SMALL SPILLS** - take up with absorbent material and place in non-leaking containers for proper disposal.

**WASTE DISPOSAL METHOD:** Assure conformity with applicable federal, state and local regulations

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Occupational Exposure Limits.....	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
*ZINC DUST	10.00 mg/M3	N/est	N/est	N/est	10.00 mg/M3
DIMETHYL ETHER	N/est	N/est	N/est	N/est	N/est
ACETONE	750.00 PPM	N/est	1000.00 PPM	1000.00 PPM	750.00 PPM
*METHYL ETHYL KETONE (HAPS)	200.00 PPM	N/est	300.00 PPM	300.00 PPM	200.00 PPM
TOLUENE (HAPS)	50.00 PPM	N/est	100.00 PPM	100.00 PPM	100.00 PPM
VM&P	100.00 PPM	N/est	125.00 PPM	125.00 PPM	100.00 PPM
XYLENE (HAPS)	100.00 PPM	N/est	150.00 PPM	150.00 PPM	100.00 PPM
MINERAL SPIRITS	100.00 PPM	N/est	N/est	N/est	100.00 PPM

**RESPIRATORY PROTECTION:** Use NIOSH approved respirator as required to prevent over-exposure. **UNCONFINED SPACES** - use a vapor/particulate respirator such as NIOSH approved No. TC-23C. **CONFINED SPACES** - use a constant flow air-line respirator such as NIOSH approved No. TC-19C.

**VENTILATION:** Provide sufficient ventilation to keep air contaminant concentration below current applicable OSHA Permissible Exposure Limit or ACGIH's TLV Limit. No smoking or open lights.

**PROTECTIVE GLOVES:** Use chemical-resistant gloves to prevent skin contact.

**EYE PROTECTION:** Use splash goggles or face shield to prevent eye contact. Contact lenses pose a special hazard; soft lenses may absorb and all lenses concentrate irritants.

**OTHER PROTECTIVE EQUIPMENT:** Use chemical-resistant or other protective outerwear to protect against clothing contamination and skin contact.

**SECTION 9. SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING, TRANSPORTATION, AND STORING:**

**CAUTION! COMBUSTIBLE.** Handling and storage conditions must be suitable for OSHA CLASS II combustible liquid. Store in cool, well ventilated, fire resistant storage area. Protect containers against physical damage. Keep away from heat, flame, and strong oxidizing

agents. Do not store above 100 degrees F. Use only with adequate ventilation. Keep containers closed when not in use. Do not breathe vapor or mist. Avoid contact with eyes, skin, and clothing. Do not take internally. Bond and ground containers of this material when pouring to avoid static sparks which create a fire hazard.

**OTHER PRECAUTIONS:** Contact lenses pose a special hazard; soft lenses may absorb and all lenses concentrate irritants.

#### **SECTION 10. REGULATORY INFORMATION**

##### **SARA TITLE III SECTION 313:**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

<b>Ingredient Name</b>	<b>CAS Number</b>	<b>Percent</b>
*ZINC DUST	7440-66-6	35.22
*METHYL ETHYL KETONE (HAPS)	78-93-3	5.03
TOLUENE (HAPS)	108-88-3	5.03
XYLENE (HAPS)	1330-20-7	5.03

**-PROP 65 (CARCINOGEN) WARNING:** this product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

<b>Ingredient Name</b>	<b>CAS Number</b>	<b>Percent</b>
ACETONE	67-64-1	15.09
TOLUENE (HAPS)	108-88-3	5.03
VM&P	64742-89-8	5.03
XYLENE (HAPS)	1330-20-7	5.03

*The information and recommendations contained herein are based on data believed to be correct. However, Alvin Products makes no warranty expressed or implied regarding the accuracy of these data or results to be obtained from the use thereof. Alvin Products assumes no responsibility for personal injury or property damage caused by the use of the material described herein. It is the responsibility of the purchaser or user to ensure that this material is properly and safely used.*