

Aviation Products Systems, Inc./Superflite Division

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID: T-170.000SF2100-1.170LAB
 Product Name: LYCOMING GREY AIRCRAFT ENGINE ENAMEL
 Product Use: Paint product.
 Date Published: 2004/08/04
 Revision Date: 2004/08/04

Company Identification

Aviation Products Systems, Inc./Superflite Division
 905 Industrial Dr.
 West Chicago, IL 60185
 Manufacturer's Phone: 1-800-323-0611

24-Hour Medical Emergency Phone: 1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS #	Approx Wt%	Chemical name
XYLENE 1330-20-7	20 - 25	Xylenes (o-, m-, p- isomers)
TALC 14807-96-6	5 - 10	TALC (MG3H2(SI03)4)
VM&P NAPHTHA-HI FLASH 64742-89-8	5 - 10	Solvent naphtha (petroleum), light aliphatic
AROMATIC NAPHTHA, LIGHT 64742-95-6	5 - 10	Petroleum naphtha, light aromatic
1,2,4-TRIMETHYLBENZENE 95-63-6	5 - 10	Pseudocumene
ETHYLBENZENE 100-41-4	1 - 5	Ethyl benzene
Trade Secret : PROPRIETARY PIGMENT	1 - 5	PROPRIETARY PIGMENT
MINERAL SPIRITS 64742-47-8	1 - 5	Petroleum distillates, hydrotreated light
CARBON BLACK 1333-86-4	.1 - 1	Carbon black

If this section is blank there are no hazardous components per OSHA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Emergency Overview:

This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:

Harmful if inhaled. May affect the brain, nervous system, or respiratory system, causing dizziness, headache, nausea or respiratory irritation.

Eye Contact:

May cause moderate eye irritation.

Skin Contact:

May cause moderate skin irritation.

Acute Ingestion:

None known

Other Effects:

May cause liver damage. May cause kidney damage.

This product contains ingredients that may contribute to the following potential chronic health effects:

Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Possible cancer hazard. Contains ingredients, which may cause cancer based on animal data. Risk of cancer depends on duration and level of exposure.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:

If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention.

Eye Contact:

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:

If swallowed, do not induce vomiting. Give large quantities of water. If available, give several glasses of milk. Never give

anything by mouth to an unconscious person. Get medical attention immediately.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	83° F (28° C) TCC/PM
Lower explosive limit:	1%
Upper explosive limit:	7%
Autoignition temperature	Not available. ° F (° C)
Sensitivity to impact:	No.
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10

Unusual fire and explosion hazards:

Contaminated rags, wipes, saw dust, etc., may catch fire spontaneously. Store waste under water in closed metal containers until disposed of in compliance with applicable regulations. Contains oxidizable materials.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Use water spray to cool nearby containers and structures exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate area. Avoid breathing of vapors. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 5, "Unusual Fire and Explosion Hazards", for proper container and storage procedures. Remove sources of ignition. Remove with inert absorbent and non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks, and flames. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:

Appropriate chemical resistant gloves should be worn. To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Required when spraying or applying in confined area. Ventilation equipment should be explosion proof. Eliminate ignition sources.

Exposure Guidelines**OSHA Permissible Exposure Limits (PEL's)**

Common Name CAS #	Approx Wt%	TWA (final)	Ceilings limits (final)	Skin designations
XYLENE 1330-20-7	20 - 25	100 ppm TWA; 435 mg/m ³ TWA		
TALC 14807-96-6	5 - 10	see Table Z-3		
1,2,4-TRIMETHYLBENZENE 95-63-6	5 - 10	25 PPM		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA; 435 mg/m ³ TWA		
Trade Secret : PROPRIETARY PIGMENT	1 - 5	15 mg/m ³ TWA (total dust)		
MINERAL SPIRITS 64742-47-8	1 - 5	100 PPM		
CARBON BLACK 1333-86-4	.1 - 1	3.5 mg/m ³ TWA		SKIN, OSHA

ACGIH Threshold Limit Value (TLV's)

Common Name CAS #	Approx Wt%	TWA	STEL	Ceiling limits	Skin designations
XYLENE 1330-20-7	20 - 25	100 ppm TWA	150 ppm STEL		
TALC 14807-96-6	5 - 10	2 mg/m ³ TWA (this TLV is for the respirable fraction of dust for Talc containing no asbestos and <1% crystalline silica)			

VM&P NAPHTHA-HI FLASH 64742-89-8	5 - 10	300 PPM			
AROMATIC NAPHTHA, LIGHT 64742-95-6	5 - 10	100 PPM			
1,2,4-TRIMETHYLBENZENE 95-63-6	5 - 10	25 PPM			
ETHYLBENZENE 100-41-4		100 ppm TWA	125 ppm STEL		
Trade Secret : PROPRIETARY PIGMENT		10 mg/m3 TWA			

MINERAL SPIRITS 64742-47-8		100 PPM			
CARBON BLACK 1333-86-4		3.5 mg/m3 TWA			

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	10 mmHG @ 68° F (20° C)
Vapor density (air = 1.0):	5.1
Boiling point:	248° F (120° C)
Solubility in water:	Insoluble.
Coefficient of water/oil distribution:	Not determined.
Density (weight per gallon):	8.69
Specific gravity (water = 1):	Not determined
Evaporation rate (butyl acetate = 1.0):	1.1

10. STABILITY AND REACTIVITY

Stability:	This product is stable.
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizers.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Silicon dioxide. Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge: Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans.

Common Name CAS #	Approx Wt%	IARC Group 1 - Human Evidence	IARC Group 2A - limited human data	IARC Group 2b - sufficient animal data
ETHYLBENZENE 100-41-4	1 - 5			Monograph 77, 2000
CARBON BLACK 1333-86-4	1 - 1			Monograph 65, 1996

Common Name CAS #	Approx Wt%	NTP Known carcinogens	NTP Suspect carcinogens	NTP Evidence of carcinogenicity
TALC 14807-96-6	5 - 10			male rat-some evidence; female rat- clear evidence; male mice-no evidence; female mice-no evidence

ETHYLBENZENE 100-41-4	1 - 5			male rat-clear evidence; female rat- some evidence; male mice-some evidence; female mice-some evidence
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Common Name CAS #	Approx Wt%	OSHA Select carcinogens	OSHA Possible carcinogens	ACGIH Carcinogens
ETHYLBENZENE 100-41-4			Monograph 77, 2000 IARC - Group 2B (Possibly carcinogenic to humans)	
CARBON BLACK 1333-86-4			Monograph 65, 1996 IARC - Group 2B (Possibly carcinogenic to humans)	A4 - Not Classifiable as a Human Carcinogen

If this section is blank, no information is available.

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

Proper Shipping Name: PAINT
 Hazard Class: 3
 UN ID Number: UN1263
 Packing Group: III

49 CFR Hazardous Material Regulations Parts 100-180

The supplier will apply the combustible liquid exception in 49 CFR 173.150(f), limited quantity or "does not sustain combustion" exceptions and consumer commodity rules, when authorized. Please check 49 CFR Parts 100-180 to determine if the use of these exceptions applies to your shipments when re-shipping our products.

International Air Transport Association:

Proper Shipping Name: PAINT
 Hazard Class: 3
 UN ID Number: UN1263
 Packing Group: III

International Maritime Organization:

Proper Shipping Name: PAINT
 Hazard Class: 3
 UN ID Number: UN1263
 Packing Group: III

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:**

Common Name CAS #	Approx Wt%	SARA 302	SARA 313	CERCLA RQ IN LBS.
XYLENE 1330-20-7	20 - 25		form R reporting required for 1.0% de minimis concentration	100
1,2,4-TRIMETHYLBENZENE 95-63-6	5 - 10		form R reporting required for 1.0% de minimis concentration	
ETHYLBENZENE 100-41-4	1 - 5		form R reporting required for 1.0% de minimis concentration	1000

SARA 311/312 Hazard Class:

Acute: Yes
 Chronic: Yes
 Flammability: Yes
 Reactivity: No
 Sudden Pressure: No

U.S. STATE REGULATIONS:**Pennsylvania Right To Know:**

ETHYLBENZENE 100-41-4
 XYLENE 1330-20-7
 PROPRIETARY PIGMENT Trade Secret

TALC	14807-96-6
MINERAL SPIRITS	64742-47-8
VM&P NAPHTHA-HI FLASH	64742-89-8
AROMATIC NAPHTHA, LIGHT	64742-95-6
1,2,4-TRIMETHYLBENZENE	95-63-6

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

Rule 66 status of product Photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

TSCA Inventory: All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List: Not all components in this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health: 3
Flammability: 3
Reactivity: 1
PPE: X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. AVIATION PRODUCTS SYSTEMS assumes no obligation or liability for use of this information. UNLESS AVIATION PRODUCTS SYSTEMS AGREES OTHERWISE IN WRITING, AVIATION PRODUCTS SYSTEMS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. AVIATION PRODUCTS SYSTEMS WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Product ID: T-170.000SF2100-1.170LAB