

Aviation Products Systems, Inc./Superflite Division Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID: T-170.000SF2200-1.170LAB
Product Name: BLACK 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	10 - 15	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
ETHYLBENZENE 100-41-4	1 - 5	Ethyl benzene
1,2,4- TRIMETHYLBENZENE 95-63-6	1 - 5	Pseudocumene
MINERAL SPIRITS 64742-47-8	1 - 5	Petroleum distillates, hydrotreated light
TOLUENE 108-88-3	1 - 5	Toluene
CARBON BLACK 1333-86-4	1 - 5	Carbon black
CRYSTALLINE SILICA 14808-60-7	.1 - 1	QUARTZ (SiO2)

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:

Corneal Injury/eye damage.

Skin Contact:

May cause moderate skin irritation.

Acute Ingestion:

None known

Other Effects:

May cause central nervous system depression. 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. Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis). Possible birth defects hazard. Contains ingredients which may cause birth defects based on animal data. May cause liver damage. Possible cancer hazard. Contains ingredients which may cause cancer based on animal data. Risk of cancer depends on duration and level of exposure. May cause kidney damage.

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/m3 TWA		
TALC 14807-96-6	10 - 15	see Table Z-3		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA; 435 mg/m3 TWA		
1,2,4- TRIMETHYLBENZENE 95-63-6	1 - 5	25 PPM		
MINERAL SPIRITS 64742-47-8	1 - 5	100 PPM		
TOLUENE 108-88-3	1 - 5	200 ppm TWA; C 300 ppm	C 300 ppm	
CARBON BLACK 1333-86-4	1 - 5	3.5 mg/m3 TWA		
CRYSTALLINE SILICA 14808-60-7	.1 - 1	see Table Z-3		

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	10 - 15	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			

ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA	125 ppm STEL		
1,2,4- TRIMETHYLBENZENE 95-63-6	1 - 5	25 PPM			
MINERAL SPIRITS 64742-47-8	1 - 5	100 PPM			
TOLUENE 108-88-3	1 - 5	50 ppm TWA			skin - potential for cutaneous absorption
CARBON BLACK 1333-86-4	1 - 5	3.5 mg/m ³ TWA			
CRYSTALLINE SILICA 14808-60-7	.1 - 1	0.05 mg/m ³ TWA (this TLV is for the respirable fraction of dust)			

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:	28 mmHG @ 68° F (20° C)
Vapor density (air = 1.0):	5.1
Boiling point:	230° F (110° 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): 2

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

Common Name CAS #	Approx Wt%	Calif- Prop. 65. Developmental Toxicity	California Prop 65 - reproductive male
TOLUENE 108-88-3	1 - 5	developmental toxicity; initial date 1/1/91	

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. Contains crystalline silica. The IARC has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystalline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

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 - 5			Monograph 65, 1996
CRYSTALLINE SILICA 14808-60-7	.1 - 1	Monograph 68, 1997; (inhaled in the form of quartz or cristobalite from occupational sources)		

Common Name CAS #	Approx Wt%	NTP Known carcinogens	NTP Suspect carcinogens	NTP Evidence of carcinogenicity
TALC 14807-96-6	10 - 15			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
TOLUENE 108-88-3	1 - 5			MALE RAT - NO EVIDENCE; FEMALE RAT - NO EVIDENCE; MALE MICE - NO EVIDENCE; FEMALE MICE - NO EVIDENCE.
CRYSTALLINE SILICA 14808-60-7	.1 - 1	Known Carcinogen		

Common Name CAS #	Approx Wt%	OSHA Select carcinogens	OSHA Possible select carcinogens	ACGIH Carcinogens
ETHYLBENZENE 100-41-4	1 - 5		Monograph 77, 2000 IARC - Group 2B (Possibly carcinogenic to humans)	
TOLUENE 108-88-3	1 - 5			A4 - Not Classifiable as a Human Carcinogen
CARBON BLACK 1333-86-4	1 - 5		Monograph 65, 1996 IARC - Group 2B (Possibly carcinogenic to humans)	A4 - Not Classifiable as a Human Carcinogen
CRYSTALLINE SILICA 14808-60-7	.1 - 1			A2 - Suspected 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
ETHYLBENZENE 100-41-4	1 - 5		form R reporting required for 1.0% de minimis concentration	1000
1,2,4- TRIMETHYLBENZENE 95-63-6	1 - 5		form R reporting required for 1.0% de minimis concentration	
TOLUENE 108-88-3	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:

TOLUENE	108-88-3
VM&P NAPHTHA-HI FLASH	64742-89-8
MINERAL SPIRITS	64742-47-8
ETHYLBENZENE	100-41-4
1,2,4-TRIMETHYLBENZENE	95-63-6
AROMATIC NAPHTHA, LIGHT	64742-95-6
XYLENE	1330-20-7
CARBON BLACK	1333-86-4
TALC	14807-96-6

Additional Non-Hazardous Materials

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

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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: All components of 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.