

MSDS: 0008597
Date: 09/15/2003
Supersedes: 01/10/2002

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DAPCO™ 3302 Silicone Adhesive, Part A
Synonyms: None
Chemical Family: Silicone in Toluene
Molecular Formula: Mixture
Molecular Weight: Mixture

D Aircraft Products, Inc.
1191 HAWK CIRCLE, ANAHEIM, CALIFORNIA 92807 714/632-8444
EMERGENCY PHONE: For product emergency involving spill, leak, fire, exposure or accident call CHEMTREC: 1-800/424-9300. Outside the USA and Canada call 1-703/527-3887.

™ indicates trademark. Mark may be registered or pending. Mark is or may be used under license.

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA REGULATED COMPONENTS

Component / CAS No.	% (w/w)	OSHA (PEL):	ACGIH (TLV)	Carcinogen
Toluene 108-88-3	40 - 70	200 ppm 300 ppm ceiling	50 ppm (skin)	
Octamethylcyclotetrasiloxane 556-67-2	< 5	Not Established	Not Established	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR:

Color: clear
Appearance: liquid
Odor: aromatic

STATEMENTS OF HAZARD:

DANGER! FLAMMABLE LIQUID AND VAPOR
CAUSES EYE BURNS AND SKIN IRRITATION

CHRONIC HAZARD WARNING:

CONTAINS MATERIAL WHICH CAUSED REPRODUCTIVE DISORDERS IN LABORATORY ANIMAL TESTS
Risk of effects depends on duration and level of exposure

DAPCO™ 3302 Silicone Adhesive, Part A MSDS: 0008597 Date: 09/15/2003 Page 3 of 7

7. HANDLING AND STORAGE

HANDLING

Precautionary Measures: Keep away from heat, sparks and flame. Do not get in eyes, on skin or on clothing. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Handling Statements: Heating to temperatures above 150 C (302 F) in the presence of air may result in the release of formaldehyde. Formaldehyde is a known animal carcinogen and is considered to be probably carcinogenic to humans by the International Agency for Research on Cancer and the National Toxicology Program. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer. The permissible exposure limit for formaldehyde should not be exceeded.

STORAGE

Areas containing this material should have fire-safe practices and electrical equipment in accordance with applicable governmental regulations for products with the flashpoint as shown (Physical and Chemical Properties Section).

Storage Temperature: Store at <29 °C 85 °F
Reason: integrity

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Eye Protection:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. Wear impermeable gloves and suitable protective clothing.

Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: clear
Appearance: liquid
Odor: aromatic
Boiling Point: 111 °C 232 °F (value for toluene)
Melting Point: Not applicable
Vapor Pressure: 22mm Hg (value for toluene)

POTENTIAL HEALTH EFFECTS

EFFECTS OF OVEREXPOSURE:

The acute oral (rat) and dermal (rabbit) LD50 values are estimated to be >900 mg/kg and >2,000 mg/kg, respectively. The 4-hour inhalation LC50 (rat) value is estimated to be >14 mg/L. Direct contact with this material may cause severe eye and moderate skin irritation. Overexposure to vapor may cause respiratory tract irritation and central nervous system depression. Refer to Section 11 for toxicology information on the regulated components of this product.

4. FIRST AID MEASURES

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Skin Contact:

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

Notes To Physician:

Formaldehyde is not a component of this product, however, heating to temperatures above 150 C in the presence of air may result in the release of formaldehyde. Formaldehyde is a known animal carcinogen and is considered to be probably carcinogenic to humans by the International Agency for Research on Cancer and the National Toxicology Program. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See Section 8 (Exposure Controls/Personal Protection).

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods For Cleaning Up:

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

DAPCO™ 3302 Silicone Adhesive, Part A MSDS: 0008597 Date: 09/15/2003 Page 4 of 7

Specific Gravity:	0.9 - 1.0
Vapor Density:	3.2
Percent Volatile (By Wt.):	53
pH:	Not available
Saturation in Air (% By Vol.):	Not available
Evaporation Rate:	1.9
Solubility in Water:	Negligible
Volatiles Organic Content:	550 gm/L
Flash Point:	2 °C 35 °F Tag Closed Cup
Flammable Limits (% By Vol):	Lower: 1.2 Upper: 7.0
Autoignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
Partition coefficient (n-octanol/water):	Not available
Odor Threshold:	See Section 2 for exposure limits.

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions To Avoid:	Keep away from heat, spark and flame.
Polymerization:	Will not occur
Conditions To Avoid:	None known
Materials To Avoid:	Strong oxidizing agents. Concentrated nitric acid, sulfuric acid, halogen and molten sulfur
Hazardous Decomposition Products:	carbon dioxide carbon monoxide formaldehyde

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION. Toxicological information on the regulated components of this product is as follows:

Toluene has acute oral (rat) and dermal (rabbit) LD50 values of 5580 mg/kg and 12124 mg/kg, respectively. The acute 4-hour inhalation (rat, female) LC50 value is 5,060 ppm (19.07 mg/L). Toluene is a severe eye and moderate skin irritant. Inhalation overexposure to toluene vapor can cause headache, fatigue, nausea, and central nervous system depression. Sustained inhalation of high levels of toluene have been shown to cause reversible kidney and liver damage. Subchronic inhalation of toluene vapors have caused permanent hearing loss, decreased learning capabilities and damage to the eyes in laboratory animal tests. Deliberate inhalation of high concentrations of toluene vapor by pregnant women has been shown to adversely affect the fetus. These fetotoxic effects include intrauterine growth retardation and delayed postnatal development. The fetotoxic effects of toluene seen in laboratory animals are similar to those seen in humans. Ingestion of toluene in laboratory animals caused mild gastritis and harmful effects on the respiratory system, kidneys, liver and heart. Ingestion in laboratory animals also caused harmful effects on the central nervous system and death. It has also been reported that subchronic ingestion of toluene caused brain and bladder damage in laboratory animals. Due to synergistic effects, the toxicity of toluene may be enhanced by exposure to n-hexane, benzene, xylene and chlorinated hydrocarbons. Toluene is a chemical known to the State of California to cause reproductive toxicity.

Octamethylcyclotetrasiloxane has an acute oral (rat) and dermal (rabbit) LD50 values of 1,540 mg/kg and 794 mg/kg, respectively. This material may cause mild eye and skin irritation.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

12. ECOLOGICAL INFORMATION

May cause long-term adverse effects in the aquatic environment. The ecological assessment for this material is based on an evaluation of its components.

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the Cytec product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA 'listed hazardous waste' or has any of the four RCRA 'hazardous waste characteristics.' Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA 'listed hazardous waste'; information contained in Section 15 of this MSDS is not intended to indicate if the product is a 'listed hazardous waste.' RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. Cytec encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. Cytec recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. Cytec has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT
 Proper Shipping Name: Adhesives
 Hazard Class: 3
 Packing Group: II
 UN/ID Number: UN1133
 Transport Label Required: Flammable Liquid
 Hazardous Substances:

Component / CAS No.	Reportable Quantity of Product (lbs)
Toluene	1,429
Benzene	11,111

- Acute
- Chronic
- Fire

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

Reactivity: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons For Issue: Revised Section 12
 Revised Section 15

Randy Deskin, Ph.D., DABT +1-973-357-3100

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

TRANSPORT CANADA

Proper Shipping Name: Adhesives
 Hazard Class: 3
 Packing Group: II
 UN Number: 1133
 Transport Label Required: Flammable Liquid

ICAO / IATA

Proper Shipping Name: Adhesives
 Hazard Class: 3
 Packing Group: II
 UN Number: 1133
 Transport Label Required: Flammable Liquid
 Packing Instructions/Maximum Net Quantity Per Package:
 Passenger Aircraft: 305; 5L
 Cargo Aircraft: 307; 60L

IMO

Proper Shipping Name: Adhesives
 Hazard Class: 3
 UN Number: 1133
 Packing Group: II
 Transport Label Required: Flammable Liquid

15. REGULATORY INFORMATION

INVENTORY INFORMATION

United States (USA): All components of this product are included on the TSCA inventory in compliance with the Toxic Substances Control Act, 15 U. S. C. 2801 et. seq.

Canada: Components of this product have been reported to Environment Canada in accordance with Sections 66 and/or 81 of the Canadian Environmental Protection Act (1999), and are included on the Domestic Substances List.

European Union (EU): All components of this product are included in the European inventory of Existing Chemical Substances (EINECS) in compliance with Council Directive 67/548/EEC and its amendments.

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ (lbs)	S313	TSCA 12B
Toluene 108-88-3	40 - 70	NONE	1000	Yes	No
Octamethylcyclotetrasiloxane 558-67-2	< 5	NONE	0	No	No
Benzene 71-43-2	< 0.1	NONE	10	Yes	No

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

MSDS: 0008598
Date: 08/06/2003
Supersedes: 11/16/2001

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DAPCO™ 3302 Silicone Adhesive, Part B
Synonyms: Nona
Chemical Family: Silanes in Toluene and Isopropanol
Molecular Formula: Mixture
Molecular Weight: Mixture

D Aircraft Products, Inc.
1191 HAWK CIRCLE, ANAHEIM, CALIFORNIA 92807 714/832-8444
EMERGENCY PHONE: For product emergency involving spill, leak, fire, exposure or accident call CHEMTREC: 1-800/424-9300. Outside the USA and Canada call 1-703/527-3887.

™ Indicates trademark. Mark may be registered or pending. Mark is or may be used under license.

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA REGULATED COMPONENTS

Component / CAS No.	% (w/w)	OSHA (PEL):	ACGIH (TLV)	Carcinogen
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine 1760-24-3	< 5.0	Not Established	Not Established	-
gamma-Aminopropyltriethoxy silane 919-30-2	< 5.0	Not Established	Not Established	-
Toluene 108-88-3	30.0 - 80.0	200 ppm 300 ppm ceiling	50 ppm (skin)	-
Isopropanol 67-63-0	30.0 - 80.0	400 ppm	400 ppm 500 ppm STEL	-

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR:

Color: clear
Appearance: liquid
Odor: amine

DAPCO™ 3302 Silicone Adhesive, Part B MSDS: 0008598 Date: 08/08/2003 Page 3 of 7

Methods For Cleaning Up:
Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

7. HANDLING AND STORAGE

HANDLING

Precautionary Measures: Keep away from heat, sparks and flame. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Handling Statements: None

STORAGE

Areas containing this material should have fire-safe practices and electrical equipment in accordance with applicable governmental regulations for products with the flashpoint as shown (Physical and Chemical Properties Section).

Storage Temperature: Store at 27 °C 80 °F
Reason: Integrity

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Eye Protection:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. Wear impermeable gloves and suitable protective clothing.

Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: clear
Appearance: liquid
Odor: amine
Boiling Point: >82 °C 180 °F
Melting Point: Not applicable
Vapor Pressure: >33mm Hg @ 20 °C
Specific Gravity: 0.83

STATEMENTS OF HAZARD:
DANGER! FLAMMABLE LIQUID AND VAPOR
CAUSES EYE BURNS AND SKIN IRRITATION
VAPOR IRRITATING

CHRONIC HAZARD WARNING:
CONTAINS MATERIAL WHICH CAUSED REPRODUCTIVE DISORDERS IN LABORATORY ANIMAL TESTS
Risk of effects depends on duration and level of exposure

POTENTIAL HEALTH EFFECTS

EFFECTS OF OVEREXPOSURE:

Acute oral (rat) and dermal (rabbit) LD50 values are estimated to be greater than 5,000 mg/kg and greater than 2,000 mg/kg, respectively.
Overexposure to vapor may cause respiratory tract irritation and central nervous system depression. Direct contact with this material may cause severe eye and moderate skin irritation. Refer to Section 11 for toxicology information on the regulated components of this product.

4. FIRST AID MEASURES

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Skin Contact:

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See Section 8 (Exposure Controls/Personal Protection).

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

DAPCO™ 3302 Silicone Adhesive, Part B MSDS: 0008598 Date: 08/08/2003 Page 4 of 7

Vapor Density: >2
Percent Volatile (By WL): >85
pH: Not applicable
Saturation in Air (% By Vol.): Not available
Evaporation Rate: >2
Solubility in Water: Reacts with water
Volatile Organic Content: 815 gm/L
Flash Point: 7 °C 45 °F (value for toluene) Tag Closed Cup
Flammable Limits (% By Vol): Lower: 1.4 Upper: 12.0
Autoignition Temperature: Not applicable
Decomposition Temperature: Not applicable
Partition coefficient (n-octanol/water): Not applicable
Odor Threshold: See Section 2 for exposure limits.

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions To Avoid: None known
Polymerization: Will not occur
Conditions To Avoid: None known
Materials To Avoid: Strong oxidizers, acids.
Hazardous Decomposition Products: May produce fumes smoke carbon monoxide carbon dioxide nitrogen silicon

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION. Toxicological information on the regulated components of this product is as follows:

Toluene has acute oral (rat) and dermal (rabbit) LD50 values of 5580 mg/kg and 12124 mg/kg, respectively. The acute 4-hour inhalation (rat, female) LC50 value is 5,060 ppm (19.07 mg/L). Toluene is a severe eye and moderate skin irritant. Inhalation overexposure to toluene vapor can cause headache, fatigue, nausea, and central nervous system depression. Sustained inhalation of high levels of toluene have been shown to cause reversible kidney and liver damage. Subchronic inhalation of toluene vapors have caused permanent hearing loss, decreased learning capabilities and damage to the eyes in laboratory animal tests. Deliberate inhalation of high concentrations of toluene vapor by pregnant women has been shown to adversely affect the fetus. These fetotoxic effects include intrauterine growth retardation and delayed postnatal development. The fetotoxic effects of toluene seen in laboratory animals are similar to those seen in humans. Ingestion of toluene in laboratory animals caused mild gastritis and harmful effects on the respiratory system, kidneys, liver and heart. Ingestion in laboratory animals also caused harmful effects on the central nervous system and death. It has also been reported that subchronic ingestion of toluene caused brain and bladder damage in laboratory animals. Due to synergistic effects, the toxicity of toluene may be enhanced by exposure to n-hexane, benzene, xylene and chlorinated hydrocarbons. Toluene is a chemical known to the State of California to cause reproductive toxicity.

N-[3-(trimethoxysilyl)-1,2-ethanediamine, also known as N-Beta-(Aminoethyl)-gamma-aminopropyltrimethoxysilane is a severe eye irritant. Direct contact may cause mild skin irritation. Other toxicological properties have not been fully investigated.

gamma-Aminopropyltriethoxy silane has acute oral (rat) and dermal (rabbit) LD50 values of 1780 mg/kg and 4000 mg/kg, respectively. Direct contact with this material caused severe eye and skin irritation when tested in rabbits. Inhalation of vapors can cause irritation of the eyes and upper respiratory tract. Prolonged contact with eyes or skin can cause chemical burns and tissue destruction. Ingestion of gamma-Aminopropyltriethoxy silane can cause damage to the gastrointestinal tract, liver, and kidneys. Absorption of this material caused kidney damage in laboratory animals.

Isopropanol has acute oral (rat) and dermal (rabbit) LD50 values of 5.0 g/kg and 12.8 g/kg, respectively. The 4-hour inhalation LC50 (rat) for isopropanol is >16,000 ppm (40.86 mg/L). Acute overexposure to isopropanol vapor may cause mild irritation of the eyes and respiratory tract. Chronic overexposure to isopropanol vapors may cause central nervous system depression, headaches, dizziness, nausea, and staggered gait. Liquid isopropanol is a severe eye irritant.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause birth defects or other reproductive harm.

12. ECOLOGICAL INFORMATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The ecological assessment for this material is based on an evaluation of its components.

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the Cytec product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-261.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. Cytec encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. Cytec recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. Cytec has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	TPQ (lbs)	RQ (lbs)	S313	TSCA 12B
Toluene 108-88-3	NONE	1000	Yes	No

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute
- Chronic
- Fire

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

Reactivity: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons For Issue: Revised Section 12

Randy Deskin, Ph.D., DABT +1-973-357-3100

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Proper Shipping Name: Adhesives

Hazard Class: 3

Packing Group: II

UN/ID Number: UN1133

Transport Label Required: Flammable Liquid

Hazardous Substances:

Component / CAS No.	Reportable Quantity of Product (lbs)
Toluene	1,667

TRANSPORT CANADA

Proper Shipping Name: Adhesives

Hazard Class: 3

Packing Group: II

UN Number: 1133

Transport Label Required: Flammable Liquid

ICAO / IATA

Proper Shipping Name: Adhesives

Hazard Class: 3

Packing Group: II

UN Number: 1133

Transport Label Required: Flammable Liquid

Packing Instructions/Maximum Net Quantity Per Package:

Passenger Aircraft: 305; 5L

Cargo Aircraft: 307; 60L

IMO

Proper Shipping Name: Adhesives

Hazard Class: 3

UN Number: 1133

Packing Group: II

Transport Label Required: Flammable Liquid

15. REGULATORY INFORMATION

INVENTORY INFORMATION

United States (USA): This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U. S. C. 2601 et. seq.

Canada: Components of this product have been reported to Environment Canada in accordance with Sections 66 and/or 81 of the Canadian Environmental Protection Act (1999), and are included on the Domestic Substances List.

European Union (EU): All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) in compliance with Council Directive 67/548/EEC and its amendments.