



SDS: 0013351
Date Prepared: 08/12/2014

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: CYCOM® 4102A Prepreg
Synonyms: None
Chemical Family: Resin impregnated on structural fabric or fiber
Molecular Formula: Mixture
Molecular Weight: Mixture
Intended/Recommended Use: Engineered materials

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA
For Product and all Non-Emergency Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.

EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:

Asia Pacific:

Australia - +61-3-9663-2130 or 1800-033-111
China (PRC) - +86 0532 83889090 (NRCC)
New Guinea - +61-3-9663-2130
New Zealand - +61-3-9663-2130 or 0800-734-607
All Others - +65 3158 1074 (Carechem24 Singapore)

Canada: +1-905-356-8310 (Cytec Welland, Canada plant)

Europe/Africa/Middle East (Carechem24 UK):

Europe, Middle East, Africa, Israel - +44 (0) 1235 239 670
Middle East, Africa (Arabic speaking countries) - +44 (0) 1235 239 671

Latin America:

Brazil - 0800 7077 022 (SUATRANS)
Chile - +56-2-247-3600 (CITUC QUIMICO)
All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

USA: +1-703-527-3887 or 1-800-424-9300 (CHEMTREC #CCN6083)

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2. HAZARDS IDENTIFICATION

GHS Classification

Carcinogenicity Hazard Category 2

LABEL ELEMENTS



Signal Word

Warning

Hazard Statements

Suspected of causing cancer

Precautionary Statements

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC), Other Hazards

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight.

By excessive exposure to dust, eye and respiratory tract irritation is possible.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification	Carcinogen
Acetone 67-64-1	< 4	Flam. Liq. 2 (H225) STOT SE 3 (H336) Skin Irrit. 3 (H316) Eye Irrit. 2A (H319)	-
Fiberglass	40 - 65	Not Classified	-
Antimony trioxide 1309-64-4	1 - 1.5	Carc. 2 (H351)	IARC 2B ACGIH A2
Hydroquinone 123-31-9	0.1 - 0.2	Carc. 2 (H351) Muta. 2 (H341) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1B (H317) Aquatic Acute 1 (H400)	ACGIH A3
Monocyclic organic compound	9 - 11	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact:

Not an expected route of exposure.

Skin Contact:

Wash immediately with plenty of water and soap.

Ingestion:

Not an expected route of exposure.

Inhalation:

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

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media:**

Use water spray or fog, carbon dioxide or dry chemical.

Extinguishing Media to Avoid:

full water jet

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus.

Special Hazards:

None known

6. ACCIDENTAL RELEASE MEASURES**Personal precautions:**

Refer to Section 8 (Exposure Controls/Personal Protection) for appropriate personal protective equipment.

Methods For Cleaning Up:

Sweep up into containers for disposal. Flush spill area with water.

References to other sections:

See Sections 8 and 13 for additional information.

7. HANDLING AND STORAGE**HANDLING**

Precautions: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Special Handling Statements: Heating or curing of unused rolls or sheets of product prior to disposal is not recommended. Heating a large mass of product can lead to a rapid decomposition reaction, generating heat, smoke and possibly fire.

STORAGE

Store in accordance with local, state, and federal regulations.

Storage Temperature: Store at $<- 12.2$ °C 10 °F

Reason: Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering Measures:**

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure when spraying or curing at elevated temperatures.

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. A full facepiece respirator also provides eye and face protection. Cutting, grinding or sanding of parts fabricated after curing may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to components listed above for potential hazardous components in the dust.

Eye Protection:

Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

Skin Protection:

Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Barrier creams may be used in conjunction with the gloves to provide additional skin protection.

Hand Protection:

Wear impermeable gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

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. Shower after completion of workshift. Launder work clothing at end of workshift, prior to reuse. Store street clothing separately from work clothing and protective equipment. Work clothing and shoes must not be taken home.

Exposure Limit(s)**123-31-9 Hydroquinone**

OSHA (PEL):	2 mg/m ³ (TWA)
ACGIH (TLV):	1 mg/m ³ (TWA)
Other Value:	Not established

1309-64-4 Antimony trioxide

OSHA (PEL):	0.5 mg/m ³ (TWA)(as Antimony compounds)
ACGIH (TLV):	0.5 mg/m ³ Sb (TWA)(as Antimony compounds)
Other Value:	Not established

67-64-1 Acetone

OSHA (PEL):	1000 ppm (TWA) 2400 mg/m ³ (TWA)
ACGIH (TLV):	750 ppm (STEL) 500 ppm (TWA)
Other Value:	Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	clear
Appearance:	resin impregnated on structural fabric or fiber
Odor:	sweet
Boiling Point:	Not applicable
Melting Point:	200 °C 392 °F
Vapor Pressure:	Not available
Specific Gravity/Density:	Not available
Vapor Density:	Not applicable
Percent Volatile (% by wt.):	Not available
pH:	Not applicable
Saturation In Air (% By Vol.):	Not applicable
Evaporation Rate:	Not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Solubility In Water:	Not available
Volatile Organic Content:	Not available
Flash Point:	Not applicable
Flammable Limits (% By Vol):	Not available
Autoignition (Self) Temperature:	Not available
Decomposition Temperature:	Not available
Partition coefficient (n-octanol/water):	Not available
Odor Threshold:	Not available
Viscosity (Kinematic):	Not available

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions To Avoid:	Keep away from heat, spark and flame.
Polymerization:	May occur
Conditions To Avoid:	Protect from heat.
Materials To Avoid:	Acids Amines Bases oxidizers
Hazardous Decomposition Products:	allyl alcohol oxides of carbon When heated to decomposition, it emits toxic fumes. hydrocarbons anhydrides Formic Acid

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY INFORMATION

Likely Routes of Exposure: Skin.

ACUTE TOXICITY DATA

oral	rat	Acute LD50	Not an expected route of exposure
dermal	rabbit	Acute LD50	>2000 mg/kg
inhalation	rat	Acute LC50 4 hr	Not an expected route of exposure

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	skin	Not irritating
Acute Irritation	eye	Not an expected route of exposure

ALLERGIC SENSITIZATION

Sensitization	skin	Not sensitizing
Sensitization	respiratory	Not an expected route of exposure

GENOTOXICITY

Assays for Gene Mutations

Ames Salmonella Assay	No data
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OTHER INFORMATION

The product toxicity information above has been estimated.

HAZARDOUS INGREDIENT TOXICITY DATA

Acetone has acute oral (rat) and dermal (rabbit) LD50 values of 5.8 g/kg and 15.7 g/kg, respectively. The LC50 (rat) for acetone vapor after a four hour exposure is 16,000 ppm (37.95 mg/L). Literature reports a LC50 inhalation (4-hr, rat) value of 29,900 ppm and acute ingestion can cause central nervous system effects. Chronic exposure to vapor may cause dryness of mouth, headache, dizziness, nausea, and loss of coordination. Liquid acetone is moderate to severely irritating to the eyes and mildly irritating to the skin. Repeated dermal application of acetone produced cataracts in the eyes of laboratory animals. High concentrations of acetone caused fetotoxic effects in laboratory animals tests. Acetone has shown positive results in in vitro screening tests for mutagenicity. Literature reports that in laboratory animal tests, acute ingestion has caused CNS effects and chronic ingestion has caused kidney and male reproductive organ effects.

Fiberglass is considered a nuisance particulate which will not cause adverse health effects other than respiratory congestion or irritation.

Antimony trioxide has an acute oral (rat) LD50 value of greater than 20,000 mg/kg. Direct contact with antimony trioxide causes mild eye and skin irritation. Inhalation may also cause respiratory tract inflammation. Ingestion will cause mild irritation to the mouth, nose, stomach and intestines. In carcinogenicity tests, female rats showed a significant increase in the incidence of lung tumors, while no tumors were seen in males. This material was mutagenic in an in vivo test. Antimony trioxide is a chemical known to the State of California to cause cancer.

Hydroquinone has an acute oral (rat) LD50 value of 320 mg/kg. Direct contact with this material may cause severe eye damage and mild skin irritation. Prolonged or repeated exposure may cause allergic skin reactions. The product has shown limited evidence of a carcinogenic effect and possible risk of irreversible effects.

Monocyclic organic compound has acute oral (rat) and dermal (rabbit) LD50 values of >500 mg/kg and >2,000 mg/kg, respectively. Direct contact with this material can cause mild eye and skin irritation. Literature reports that this material has shown positive results in bacteria and cultured mammalian cells.

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

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

Environmental exposure from substances of this preparation are limited due to the physical form of the product. This material is not classified as dangerous for the environment.

RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Acetone 67-64-1	Not available	LC50 6210 - 8120 mg/L - Pimephales promelas (96h) static LC50 4.74 - 6.33 mL/L - Oncorhynchus mykiss (96h) LC50 = 8300 mg/L - Lepomis macrochirus (96h)	EC50 10294 - 17704 mg/L - Daphnia magna (48h) Static EC50 12600 - 12700 mg/L - Daphnia magna (48h)
Fiberglass	Not available	Not available	Not available
Antimony trioxide 1309-64-4	EC50 0.65 - 0.81 mg/L - Pseudokirchneriella subcapitata (96h) EC50 0.63 - 0.8 mg/L - Pseudokirchneriella subcapitata (72h)	LC50 > 1000 mg/L - Brachydanio rerio (96h) static LC50 > 80 mg/L - Pimephales promelas (96h) static	EC50 > 1000 mg/L - Daphnia magna (48h) EC50 361.5 - 496.0 mg/L - Daphnia magna (48h) Static
Hydroquinone 123-31-9	EC50 = 0.335 mg/L - Pseudokirchneriella subcapitata (72h)	LC50 0.1 - 0.18 mg/L - Pimephales promelas (96h) static LC50 = 0.17 mg/L - Brachydanio rerio (96h) LC50 = 0.044 mg/L - Oncorhynchus mykiss (96h) flow- through LC50 = 0.044 mg/L - Pimephales promelas (96h) flow- through	EC50 = 0.29 mg/L - Daphnia magna (48h)
Monocyclic organic compound	Not available	Not available	Not available

13. DISPOSAL CONSIDERATIONS

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the 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 3 (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. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company 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

Dangerous Goods? X

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.

Hazard Class: 9

Packing Group: III

UN/ID Number: UN3077

Transport Label Required: Miscellaneous

Technical Name (N.O.S.): Contains antimony trioxide and benzoquinone

<u>Component / CAS No.</u>	<u>Hazardous Substances / Reportable Quantity of Product (lbs)</u>
Arsenic	30204.18
Benzoquinone	6637.462

Comments: Hazardous Substances/Reportable Quantities - DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or exceeds the product reportable quantity.

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

15. REGULATORY INFORMATION

Inventory Information

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): This product is an article that does not intentionally release substances under normal conditions of use and is therefore exempt from the registration requirements under the REACH Regulation (EC) No. 1907/2006.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

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
Antimony trioxide 1309-64-4	1 - 1.5	None	1000	Yes	No
Benzoquinone 106-51-4	0.1 - 0.2	None	10	Yes	No

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Chronic

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 1 - Materials that, under emergency conditions, can cause significant irritation.

Fire: 1 - Materials that must be preheated before ignition can occur.

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

Reasons For Issue: New Format

Date Prepared: 08/12/2014

Date of last significant revision: 08/12/2014

Component Hazard Phrases

Acetone

H225 - Highly flammable liquid and vapor.
H316 - Causes mild skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Antimony trioxide

H351 - Suspected of causing cancer.

Hydroquinone

H302 - Harmful if swallowed.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H341 - Suspected of causing genetic defects.
H351 - Suspected of causing cancer.
H400 - Very toxic to aquatic life.

Monocyclic organic compound

H302 - Harmful if swallowed.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Prepared By: Legal & Compliance Services; E-mail: custinfo@cytec.com

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