AIRTECH
ADVANCED MATERIALS GROUP

MATERIAL SAFETY DATA SHEET
Release Ply A – Issue Date: April 13, 2005

SECTION I - PRODUCT IDENTIFICATION

Trade Name: **Release Ply A**
Product Class:
Supplier: **Airtech International, Inc.**
5700 Skylab Road
Huntington Beach, CA 92647
Telephone: 714-899-8100
Fax: 714-899-8179

Emergency Telephone: **800-424-9300**

CERCLA Ratings:	Health=	Fire=	Reactivity=	Persistence=
NFPA Ratings:	Health=	Fire=	Reactivity=	
Formula:	CAS#:			

SECTION II – HAZARDOUS INGREDIENTS

Isopropyl Alcohol
CAS #67-63-0 Percent by weight: 5.0
PEL/TLV (units) 400 ppm

Release Ply A is a solid organic polymer composed of carbon, hydrogen and oxygen. There are no known physical or health hazards associated with the product itself.

Release Ply A has been tested for toxicity by skin tests on animals and humans and by feeding tests in animals. No toxic reactions have been observed. We have received no reports of adverse health effects which can be attributed to this product.

There is a possibility for certain potential hazards to result from the processing of the product. Although we cannot know every conceivable processing condition, we feel you should be aware of this potential in general.

If in processing there is significant potential for the fiber itself to become airborne, an airborne exposure limit is recommended of 10mg fiber as particulate/m as an 8 hour time weighted average (TWA).

The product may contain up to five percent titanium dioxide (TiO CAS No. 13463©67©2) as a delustrant. Animal studies have shown a low incidence of lung tumors in some rats exposed by inhalation to a massive airborne level of pure TiO dust (250mg/m) for their lifetime. No pathological or toxicologically significant effects or clinical signs of toxicity were observed at any of the lower test levels (50 and 10mg/m). We do not believe pure TiO presents a significant hazard if airborne concentrations are controlled to a reasonable level. We have concluded the American Conference of Government Industrial Hygienist (ACGIH) TLV of 10mg TiO /m as total dust and 5mg Tio /m respirable dust, as 8-hour TWA for airborne exposures will provide adequate protection of employees.

This product may contain up to three percent fiber lubricants, typically consisting of various formulations of natural oils such as coconut and peanut oils, esters, oleates, palmitates and stearates. These lubricating oils are toxicologically evaluated prior to product commercialization and have been found to be generally of a low order of acute oral and inhalation toxicity in animals and dermal toxicity in humans and do not present a significant health hazard in their normal handling and use. If in processing there is a potential to generate airborne concentrations of these oils as a mist, we recommend an airborne exposure limit of 5mg as particulate/m as an 8-hour TWA.

If heated to elevated temperatures (200-250°C) during processing, these lubricating oils can degrade and generate off gases which may contain very small amounts of such chemicals as formaldehyde, ethanol, acetone, etc. The exact chemical composition of these oils will, of course, depend on the conditions of heating, (temperature, duration, availability of oxygen). In our experience we are not aware of chemicals such as these reaching concentrations that present a serious health hazard. However, information on the toxic effects and recommended exposure limits of these and other chemicals can be found in the most recent edition of the ACGIH Documentation of Threshold Limit Values.

SECTION III – PHYSICAL DATA

Boiling point:	81°C/171°F isoPrOH
Specific gravity:	1.08 (H O = 1)
Vapor Pressure:	33mm/16°C.60°F-isoPrOH
Vapor Density:	>1 isoPrOH
Solubility in water:	Insoluble
Evaporation Rate:	>1 isoPrOH
Percent Volatile by volume (%)	75%

SECTION IV – FIRE AND EXPLOSION DATA

Unusual Fire and explosion hazard:
Release Ply A is capable of burning, giving off oxides of carbon and hydrogen cyanide. isoPrOH vapors can travel to a source of ignition.
Flash point temperature: 120° F **Method used:** Closed cup
Flammable Limits: Lel: 2% Uel: 12%
Firefighting procedure:
Wear respirator (pressure demand, self-contained breathing apparatus, MSHA/NIOSH approved or equivalent) full protective gear.
Extinguishing Media:
Foam, CO2, dry chemical, water spray

SECTION V – HEALTH HAZARD DATA

Emergency and First Aid Procedures:
In case of inhalation:
Vapor can irritate the nose and throat and cause drowsiness, slurred speech, headache, nausea, dizziness, stupor and unconsciousness. First Aid: Move subject to fresh air. Give artificial respiration if breathing has stopped. Get prompt medical attention.
In case of eye contact:
Moderate to severely irritating to eyes; possible permanent injury. First Aid: Flush eyes with large amount of water for at least 15 minutes. Get prompt medical attention.
In case of skin contact:
Severely irritating to skin. First Aid: Wash skin thoroughly with soap/water. Remove and wash clothing before reuse.
In case of ingestion:
If swallowed dilute by giving 2 glasses of water to drink. See physician. Never give anything by mouth to an unconscious person.

SECTION VI – REACTIVITY DATA

Stability: Stable
Incompatibilities: N/A
Polymerization: Will not occur
Conditions to Avoid: Excessive heat

SECTION VII – SPILL OR LEAK PROCEDURE

Steps to be taken in case material is released or spilled:
Keep unnecessary people away. Dike and contain spill with inert material (sand, earth, etc.) and transfer any liquid to containers for recovery or disposal. Keep spill out of sewers/open bodies of water. Floors may be slippery, care should be exercised to avoid falls.
Waste Disposal Method:
Coagulate the emulsion with ferric chloride or sulfate and then lime to a clear end-point. Decant the clear liquid to sewer and landfill the coagulate. Incineration of entire emulsion is possible but impractical because of high water content. Coagulum may be incinerated.

SECTION VIII – SPECIAL PROTECTION INFORMATION

While no special controls or handling procedures are required, it is important that exposure to any inhalable material be minimized by the use of adequate ventilation, such as local exhaust, effective containment and personal cleanliness.

If ventilation is not adequate, wear MSHA/NIOSH approved respirator suitable for vapor/mist concentrations encountered.

Protective Gloves: Impervious
Eye Protection: Safety glasses

When **Release Ply A** is burned, no unusual combustion gases have been observed, and its combustion products are similar to those of other organic materials composed of the same elements. Release Ply A is not readily biodegradable, nor radioactive. It contains no significant percentage of materials extractable in water so its effect on ground water in case of landfill should be negligible. It is stable in all recommended use environments.

SECTION IX – SPECIAL PRECAUTIONS

None

USER'S RESPONSIBILITY

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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