

Material Safety Data Sheet

Prepared 5/26/10

Associated Technologies – AT-2010 (Component A) – Acrylic Adhesive

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: AT-2010 (COMPONENT A)	Product Type: Acrylics
Associated Technologies	Information Telephone 860-788-3380
694 Higganum Road	Emergency Telephone # (800) 255-3924 (CHEM•TEL)
Durham, CT 06422	Outside North America #: (813) 248-0585 (Call Collect)

SECTION 2– COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Methyl methacrylate 80-62-6	30 - 60	100 ppm STEL 50 ppm TWA	100 ppm TWA 410 mg/m ³ TWA	50 ppm
Polythylene based rubber Proprietary	10-30	None	None	None
Nepheline syenite 37244-96-5	5-10	None	None	None
Acrylonitrile-butadiene-styrene terpolymer 9003-56-9	5-10	None	None	None
Methacrylic acid 79-41-4	1-5	20 ppm TWA	None	None
2,6-Dit-butyl-p-cresol 128-37-0	1-5	2 mg/m ³ TWA	None	None
Talc 14807-96-6	0.1-1	2 mg/m ³ TWA	= 20 mppcf TWA	50 ppm
Hydroquinone 123-31-9	0.1-1	2 mg/m ³ TWA	2 mg/m ³ TWA	None

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical State: Paste	HMIS: Health: 2
Color: White Opaque	Flammability: 3
Odor: Sharp	Physical Hazard: 1
	Personal Protection: See Section 8

WARNING: Flammable Liquid And Vapor. May Cause Eye, Skin And Respiratory Tract Irritation
May Cause Allergic Skin Reaction. May Be harmful If Swallowed

Relevant Routes Of Exposure: Inhalation, Skin Contact, Eye Contact, Ingestion

Potential Health Effects

Inhalation	Vapors May Cause headaches, Nausea, Dizziness and Respiratory Track irritation.
Skin Contact:	May Cause Skin Irritation. May Cause Allergic Skin Reaction
Eye Contact	Non-Irritating
Ingestion	May Be Harmful If Swallowed
Existing Conditions Aggravated By Exposure	Eye, Skin And Respiratory Disorders See Section 11 For Additional Toxicological Information

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove To Fresh Air, If Symptoms Develop And Persist, Get Medical Attention
Skin Contact	Wash With Soap And Water. Remove Contaminated Clothing And Shoes. Wash Clothing Before Reuse. Get Medical Attention If Symptoms Occur.
Eye Contact	Flush With Copious Amounts Of Water, Preferably, Lukewarm Water For At Least 15 Minutes, Holding Eyelids Open All The Time. Get Medical Attention
Ingestion:	Do Not Induce Vomiting. Keep Individual Calm. Obtain Medical Attention

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point:	14° C (58° F) Setaflash Closed Cup
Autoignition Temperature:	Not Available
Flammable/Explosive Limits – Lower %	Not Available
Flammable/Explosive Limits – Upper %	Not Available
Extinguishing Media:	Foam, Dry Chemical Or Carbon Dioxide
Special Fire Fighting Procedures:	None
Unusual Fire Or Explosion Hazards:	Vapors May Accumulate In Low Or Confined Areas, Travel Considerable Distance To Source Of Ignition And Flash Back
Hazardous Combustion Products:	Oxides Of Carbon. Oxides Of Nitrogen. Styrene, Acrylonitrile, Acetaldehyde, Acetophenone, Ethylbenzene, Cumene, 4-Vinylcyclohexene, Phenols, Carbon Tetrachloride, Sulfur Dioxide Fumes. Acrid Smoke And Fumes, Irritating Organic Vapors

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions:	Prevent Product For Entering Drains Or Open Waters
Clean-Up Methods:	Remove All Ignition Sources. Ensure Adequate Ventilation. Soak Up With Inert Absorbent. Store In A Closed Container Until Ready For Disposal

SECTION 7 – HANDLING AND STORAGE

Handling:	Avoid Contact With Eyes, Skin And Clothing. Avoid Breathing Vapor And Mist. Wash Thoroughly After Handling. During Use And Until All Vapors Are Gone: Keep Area Ventilated – Do Not Smoke; Extinguish All Flames, Pilot Lights, And Heaters; Turn Off Stoves, Electrical Tools And Appliances, And Any Other Sources Of Ignition. Make Sure Containers Are Properly Grounded Before Use Or Transfer Of Material
Storage:	Keep In A Cool, Well Ventilated Area Away From Heat, Sparks And Open Flame. Keep Container Tightly Closed Until Ready For Use. For Safe Storage, Store At Or Below 32° F
Incompatible Products	Refer To Section 10.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Use Local Exhaust Ventilation To Maintain Airborne Concentrations Below Established Exposure Limits
Respiratory Protection:	Use NIOSH Approved Respirator If There Is Potential To Exceed Exposure Limit(s).
Skin Protection:	Chemical Resistant, Impermeable Gloves. Nitrile Gloves.
Eye/Face Protection	Safety Goggles Or Safety Glasses With Side Shields

See Section 2 For Exposure Limits

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Paste
Color:	White Opaque
Odor:	Sharp
Vapor Pressure:	28 mmHg@ 20° C (68° F)
PH:	Not Applicable
Boiling Point/Range:	Greater Than 100° C (212° F)
Melting Point/Range:	Not Available
Specific Gravity:	1.06
Vapor Density:	Greater Than 1
Evaporation Rate:	Faster Than Ether
Solubility In Water:	Completely Miscible
Partition Coefficient (n-octanol/water)	Not Available
VOC Content	(EPA Method 24) 0.98%; 9.8 Grams/Liter (Adhesive And Activator Mixed)

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: May Occur
Hazardous Polymerization:: Oxides Of Carbon. Oxides Of Nitrogen. Toxic Fumes. Irritating Organic Vapors. Smoke
Incompatibility:: Oxidizing Agents. Reducing Agents. Acids. Bases. Styrene, Acrylonitrile, Acetaldehyde, Acetophenone, Ethylbenzene, Cumene, 4-Vinylcyclohexene, Phenols, Carbon Tetrachloride, Sulfur Dioxide.
Conditions To Avoid: See "Handling And Storage" (Section 7) and "Incompatibility" (Section 10). Do not Mix In Batches Greater Than 100 Grams (0.22 pounds) Unless You Plan To Use Immediately

SECTION 11 – TOXICOLOGICAL INFORMATION

Carcinogen Status:

<u>Hazardous Components</u>	<u>NTP Carcinogen</u>	<u>IARC Carcinogen</u>	<u>OSHA Carcinogen</u>
Methyl methacrylate 80-62-6	No	No	No
Polyethylene based rubber Proprietary	No	No	No
Nepheline syenite 37244-96-5	No	No	No
Acrylonitrile-butadiene-styrene terpolymer 9003-56-9	No	No	No
Methacrylic acid 79-41-4	No	No	No
2,6-Dit-butyl-p-cresol 128-37-0	No	No	No
Talc 14807-96-6	No	No	No
Hydroquinone 123-31-9	No	No	No

Literature Referenced Target Organs & Other Health Effects:

<u>Hazardous Components</u>	<u>Health Effects / Target Organs</u>
Methyl methacrylate 80-62-6	Allergen, Irritant, Kidney, Liver, Nervous System, Respiratory, Mutagen
Polyethylene based rubber Proprietary	No Target Organs
Nepheline syenite 37244-96-5	No Target Organs
Acrylonitrile-butadiene-styrene terpolymer 9003-56-9	No Target Organs
Methacrylic acid 79-41-4	Allergen, Corrosive, Irritant
2,6-Dit-butyl-p-cresol 128-37-0	Mutagen, Irritant
Talc 14807-96-6	Some Evidence Of Carcinogenicity, Lung, Irritant
Hydroquinone 123-31-9	Thyroid, Skin, Mutagen, Liver, Irritant, Immune System, Eyes, Central Nervous System, Bone Marrow, Blood Developmental

SECTION 12 – Ecological Information

Ecological Information: None Available

SECTION 13 – Disposal Considerations

Recommended Disposal Method: Dispose Of According To Federal, State, And Local Governmental Regulations
EPA Hazardous Waste Number:: D001: Ignitable. D019: Carbon Tetrachloride

SECTION 14 – TRANSPORT INFORMATION

US DOT Transportation Ground (49 CFR)

Proper Shipping Name: Adhesives
Hazard Class Or Division: 3
Identification Number: UN 1133
Packing Group: II
Exceptions: Consumer Commodity ORM-D (Not More Than 1 Liter)

International Air Transportation: (ICAO/IATA):

Proper Shipping Name: Adhesives
Hazard Class Or Division: 3
Identification Number: UN 1133
Packing Group: II
Exceptions: May Qualify As consumer Commodity ID8000 (Not More Than 500 ML)

Water Transportation: (IMO/IMDG):

Proper Shipping Name: Adhesives
Hazard Class Or Division: 3
Identification Number: UN 1133
Packing Group: II
Exceptions: Dangerous Goods In Limited Quantities Of Class 3 (Not More Than 1 Liter)
Marine Pollutant: None

SECTION 15 – Regulatory Information

United States Regulatory Information

TSCA 8 (b) Inventory Status: All Components Are Listed Or Are Exempt From Listing On The Toxic Substances Control Act Inventory
TSCA 1 (b) Export Notification: None
CERCLA/SARA Section 302 EHS: Hydroquinone (CAS# 123-31-9)
CERCLA/SARA Section 311/312: Immediate Health Hazard, Delayed Health Hazard, Fire.
Cercla/Sara 313: This Product Contains The Following Toxic Chemicals Subject To The Reporting Requirements Of Section 313 Of The Emergency Planning And Community Right To Know Act Of 1986 (40 CVR 372) Methyl Methacrylate (CAS# 80-62-6
California Proposition 65: This Product Contains A Chemical Known In The State Of California To Cause Cancer. Acrylonitrile (CAS#107-13-1). Cyclohexene, 4-Ethenyl (CAS# 100-40-3). Carbon Tetrachloride (CAS# 56-23-5). Chloroform (CAS# 67-66-3)

Canada Regulatory Information

CEPA DSL/NDSL Status: All Components Are Listed On Or Are Exempt From Listing On The Domestic Substances List.
WHMIS Hazard Class: B.2, D.2.A, D.2.B

SECTION 16 – Other Information

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Associated Technologies, LLC. Does not assume responsibility for any results obtained by persons over whose methods Associated Technologies, LLC has no control. It is the user's responsibility to determine the suitability of Associated Technologies, LLC products or any other production methods mentioned herein for a particular purpose and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in handling and use of any Associated Technologies, LLC's products. In light of the foregoing, Associated Technologies, LLC. Specifically disclaims all warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Associated Technologies, LLC's products. Associated Technologies further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Material Safety Data Sheet

Prepared 5/26/10

Associated Technologies – AT-2010 (Component B) – Acrylic Adhesive

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: AT-2010 (COMPONENT B)
Associated Technologies
694 Higganum Road
Durham, CT 06422

Product Type: Acrylics
Information Telephone 860-788-3380
Emergency Telephone # (800) 255-3924 (CHEM•TEL)
Outside North America #: (813) 248-0585 (Call Collect)

SECTION 2– COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Methyl methacrylate 80-62-6	30 - 60	100 ppm STEL 50 ppm TWA	100 ppm TWA 410 mg/m ³ TWA	50 ppm
Synthetic Rubber Proprietary	10-30	None	None	None
Acrylic Polymer Unknown	10 - 30	None	None	None
Nepheline Syenite 37244-96-5	5-10	None	None	None
Aldehyde-amine Condensate Proprietary	1-5	None	None	None
Toluene 108-88-3	0.1 - 1	50 ppm TWA (Skin)	200 ppm TWA 300 ppm Ceiling	None
Styrene Monomer 100-42-5	0.1-1	200 ppm TWA 40 ppm STEL	100 ppm TWA 200 PPM Ceiling	None

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical State: Paste

Color: Tan To Yellow Opaque

Odor: Sharp

HMIS: Health: 2

Flammability: 3

Physical Hazard: 1

Personal Protection: See Section 8

WARNING: Flammable Liquid And Vapor. May Cause Eye, Skin And Respiratory Tract Irritation
May Cause Allergic Skin Reaction. May Be harmful If Swallowed

Relevant Routes Of Exposure: Inhalation, Skin Contact, Eye Contact, Ingestion

Potential Health Effects

Inhalation

Skin Contact:

Eye Contact

Ingestion

Existing Conditions Aggravated
By Exposure

Vapors May Cause headaches, Nausea, Dizziness and Respiratory Track irritation.

May Cause Skin Irritation. May Cause Allergic Skin Reaction

Non-Irritating

May Be Harmful If Swallowed

Eye, Skin And Respiratory Disorders

See Section 11 For Additional Toxicological Information

SECTION 4 – FIRST AID MEASURES

Inhalation: Remove To Fresh Air, If Symptoms Develop And Persist, Get Medical Attention

Skin Contact: Wash With Soap And Water. Remove Contaminated Clothing And Shoes. Wash Clothing Before Reuse. Get Medical Attention If Symptoms Occur.

Eye Contact: Flush With Copious Amounts Of Water, Preferably, Lukewarm Water For At Least 15 Minutes, Holding Eyelids Open All The Time. Get Medical Attention

Ingestion: Do Not Induce Vomiting. Keep Individual Calm. Obtain Medical Attention

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point:	14° C (58° F) Setaflash Closed Cup
Autoignition Temperature:	Not Available
Flammable/Explosive Limits – Lower %	Not Available
Flammable/Explosive Limits – Upper %	Not Available
Extinguishing Media:	Foam, Dry Chemical Or Carbon Dioxide
Special Fire Fighting Procedures:	None
Unusual Fire Or Explosion Hazards:	Vapors May Accumulate In Low Or Confined Areas, Travel Considerable Distance To Source Of Ignition And Flash Back
Hazardous Combustion Products:	Oxides Of Carbon. Oxides Of Nitrogen. Toxic Fumes. Acrid Smoke And Fumes, Irritating Organic Vapors

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions:	Prevent Product For Entering Drains Or Open Waters
Clean-Up Methods:	Remove All Ignition Sources. Ensure Adequate Ventilation. Soak Up With Inert Absorbent. Store In A Closed Container Until Ready For Disposal

SECTION 7 – HANDLING AND STORAGE

Handling:	Avoid Contact With Eyes, Skin And Clothing. Avoid Breathing Vapor And Mist. Wash Thoroughly After Handling. During Use And Until All Vapors Are Gone: Keep Area Ventilated – Do Not Smoke; Extinguish All Flames, Pilot Lights, And Heaters; Turn Off Stoves, Electrical Tools And Appliances, And Any Other Sources Of Ignition. Make Sure Containers Are Properly Grounded Before Use Or Transfer Of Material
Storage:	Keep In A Cool, Well Ventilated Area Away From Heat, Sparks And Open Flame. Keep Container Tightly Closed Until Ready For Use. For Safe Storage, Store At Or Below 32° F
Incompatible Products	Refer To Section 10.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Use Local Exhaust Ventilation To Maintain Airborne Concentrations Below Established Exposure Limits
Respiratory Protection:	Use NIOSH Approved Respirator If There Is Potential To Exceed Exposure Limit(s).
Skin Protection:	Chemical Resistant, Impermeable Gloves. Nitrile Gloves.
Eye/Face Protection	Safety Goggles Or Safety Glasses With Side Shields

See Section 2 For Exposure Limits

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Paste
Color:	Tan To Yellow Opaque
Odor:	Sharp
Vapor Pressure:	Not Available
PH:	Not Applicable
Boiling Point/Range:	Greater Than 100° C (212° F)
Melting Point/Range:	Not Available
Specific Gravity:	1.03
Vapor Density:	Greater Than 1
Evaporation Rate:	Faster Than Ether
Solubility In Water:	Completely Miscible
Partition Coefficient (n-octanol/water)	Not Available
VOC Content	(EPA Method 24) 0.98%; 9.8 Grams/Liter (Adhesive And Activator Mixed)

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: May Occur
Hazardous Polymerization:: Oxides Of Carbon. Oxides Of Nitrogen. Toxic Fumes. Irritating Organic Vapors. Smoke
Incompatibility:: Oxidizing Agents. Reducing Agents. Acids. Bases.
Conditions To Avoid: See "Handling And Storage" (Section 7) and "Incompatibility" (Section 10). Do not Mix In Batches Greater Than 100 Grams (0.22 pounds) Unless You Plan To Use Immediately

SECTION 11 – TOXICOLOGICAL INFORMATION

Carcinogen Status:

<u>Hazardous Components</u>	<u>NTP Carcinogen</u>	<u>IARC Carcinogen</u>	<u>OSHA Carcinogen</u>
Methyl methacrylate 80-62-6	No	No	No
Synthetic Rubber Proprietary	No	No	No
Acrylic Polymer Unknown	No	No	No
Nepheline Syenite 37244-96-5	No	No	No
Aldehyde-amine Condensate Proprietary	No	No	No
Toluene 108-88-3	No	No	No
Styrene Monomer 100-42-5	No	Group 2B	No

Literature Referenced Target Organs & Other Health Effects:

<u>Hazardous Components</u>	<u>Health Effects / Target Organs</u>
Methyl methacrylate 80-62-6	Allergen, Irritant, Kidney, Liver, Nervous System, Respiratory, Mutagen
Synthetic Rubber Proprietary	No Target Organs
Acrylic Polymer Unknown	No Data
Nepheline Syenite 37244-96-5	No Target Organs
Aldehyde-amine Condensate Proprietary	No Data
Toluene 108-88-3	Behavioral, Cardiac, Central Nervous System, Developmental, Ear, Irritant
Styrene Monomer 100-42-5	Blood, Ear, Eyes, Irritant, Liver, Mutagen, Nervous System, Some Evidence Of Carcinogenicity

SECTION 12 – Ecological Information

Ecological Information: None Available

SECTION 13 – Disposal Considerations

Recommended Disposal Method: Dispose Of According To Federal, State, And Local Governmental Regulations
EPA Hazardous Waste Number:: D001: Ignitable.

SECTION 14 – TRANSPORT INFORMATION

US DOT Transportation Ground (49 CFR)

Proper Shipping Name:	Adhesives
Hazard Class Or Division	3
Identification Number:	UN 1133
Packing Group:	II
Exceptions:	Consumer Commodity ORM-D (Not More Than 1 Liter)

International Air Transportation: (ICAO/IATA):

Proper Shipping Name:	Adhesives
Hazard Class Or Division	3
Identification Number:	UN 1133
Packing Group:	II
Exceptions:	May Qualify As consumer Commodity ID8000 (Not More Than 500 ML)

Water Transportation: (IMO/IMDG):

Proper Shipping Name:	Adhesives
Hazard Class Or Division	3
Identification Number:	UN 1133
Packing Group:	II
Exceptions:	Dangerous Goods In Limited Quantities Of Class 3 (Not More Than 1 Liter)
Marine Pollutant	None

SECTION 15 – Regulatory Information

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All Components Are Listed Or Are Exempt From Listing On The Toxic Substances Control Act Inventory
TSCA 1 (b) Export Notification:	None
CERCLA/SARA Section 302 EHS:	None
CERCLA/SARA Section 311/312:	Immediate Health Hazard, Delayed Health Hazard, Fire.
Cercla/Sara 313:	This Product Contains The Following Toxic Chemicals Subject To The Reporting Requirements Of Section 313 Of The Emergency Planning And Community Right To Know Act Of 1986 (40 CVR 372) Methyl Methacrylate (CAS# 80-62-6). Styrene Monomer (CAS# 100-42-5)
California Proposition 65:	This Product Contains A Chemical Known In The State Of California To Cause Cancer And Birth Defects Or Other Reproductive Harm. Acrylonitrile (CAS# 107-13-1). Cyclohexene, 4-Ethenyl (CAS# 100-40-3). Benzene (CAS# 71-43-2). Ethyl Acrylate (CAS# 140-88-5)

Canada Regulatory Information

CEPA DSL/NDSL Status:	All Components Are Listed On Or Are Exempt From Listing On The Domestic Substances List.
WHMIS Hazard Class:	B.2, D.2.A, D.2.B

SECTION 16 – Other Information

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Associated Technologies, LLC. Does not assume responsibility for any results obtained by persons over whose methods Associated Technologies, LLC has no control. It is the user's responsibility to determine the suitability of Associated Technologies, LLC products or any other production methods mentioned herein for a particular purpose and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in handling and use of any Associated Technologies, LLC's products. In light of the foregoing, Associated Technologies, LLC. Specifically disclaims all warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Associated Technologies, LLC's products. Associated Technologies further disclaims any liability for consequential or incidental damages of any kind, including lost profits.