AIRTECH
ADVANCED MATERIALS GROUP

MATERIAL SAFETY DATA SHEET

Airtac 2 Spray Adhesive – Issue Date: April 11, 2005

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Trade Name: **Airtac 2 Spray Adhesive**
Product Description: Spray Adhesive

Supplier: **Airtech International, Inc.**
5700 Skylab Road
Huntington Beach, CA 92647
Telephone: 714-899-8100
Fax: 714-899-8179

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

NFPA Hazard Codes: Health = 2 Fire = 4 Reactivity = 0
(scale 0-4)
Unusual Reaction Hazard: None
OSHA Fire Hazard Class: Class IA Flammable Liquid

Product Use:
Intended Use: General purpose aerosol adhesive
Specific Use: General Purpose Aerosol adhesive

SECTION II – INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
ACETONE	67-64-1	20 - 30
NON-VOLATILE COMPONENTS – N.J. TRADE SECRET REGISTRY NO. 04499600-6433P	Trade Secret	20 - 30
PROPANE	74-98-6	15 - 25
2-METHYLPENTANE	107-83-5	10 - 20
CYCLOHEXANE	110-82-7	3 - 7
3-METHYLPENTANE	96-14-0	3 - 7
2,2-DIMETHYLBUTANE	75-83-2	1 - 3
2,3-DIMETHYLBUTANE	79-29-8	1 - 3
HEXANE	110-54-3	<0.8

SECTION III – HAZARDS IDENTIFICATION

3.1 Emergency Overview
Specific Physical Form: Aerosol
Odor, Color, Grade: clear, sweet fruity odor
General Physical Form: Gas aerosol

Immediate health, physical, and environmental hazards:
Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure. Aerosol container contains flammable gas under pressure. Flammable liquefied gas. May cause target organ effects.

3.2 Potential Health Effects
Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
Skin Contact:
Prolonged or repeated exposure may cause:
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.
May be absorbed through skin and cause target organ effects.
Inhalation:
Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
May be absorbed following inhalation and cause target organ effects.
Intentional concentration and inhalation may be harmful or fatal.
Ingestion:
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.
May be absorbed following ingestion and cause target organ effects.
Target Organ Effects:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure, above recommended guidelines, may cause:
Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.
Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

SECTION IV – FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact:
Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.
Skin Contact:
Wash affected area with soap and water. If signs/symptoms develop, get medical attention.
Inhalation:
Remove person to fresh air. If signs/symptoms develop, get medical attention.
If Swallowed:
Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person.
Get immediate medical attention.

SECTION V – FIRE FIGHTING MEASURES

5.1 Flammable Propeties

Autoignition temperature	*No Data Available*
Flash Point	-42.00 ºF [*Test Method:* Tagliabue Closed Cup]
Flammable Limits – LEL	*No Data Available*
Flammable Limits – UEL	*No Data Available*
OSHA Flammability Classification:	Class IA Flammable Liquid

5.2 Extinguishing Media
Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).
5.3 Protection of fire fighters

Special Fire Fighting Procedures:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.
Unusual Fire and Explosion Hazards:
Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure. Flammable liquefied gas.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:
Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate organic solvent. Read and follow safety precautions on the solvent label and MSDS. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION VII – HANDLING AND STORAGE

7.1 Handling
Avoid eye contact with vapors, mists, or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Aerosol container contains flammable gas under pressure. No smoking while handling this material. Do not spray near flames or sources of ignition. Do not pierce or burn container, even after use. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Keep out of the reach of children.
7.2 Storage
Store away from heat. Store away from acids. Store out of direct sunlight.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Use with functioning spray booth or local exhaust. Use with appropriate local exhaust ventilation. Do not use in a confined area or areas with little or no air movement. Use in a well-ventilated area. If exhaust ventilation is not available, use appropriate respiratory protection. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. Do not use in a

confined area or areas with little or no air movement. If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapor concentrations below recommended exposure limits and/or control spray or mist.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Safety Glasses with side shields.
8.2.2 Skin Protection
Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
8.2.3 Respiratory Protection
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges.

8.2.4 Prevention of Swallowing
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
ACETONE	ACGIH	TWA	500 ppm	Table A4
ACETONE	ACGIH	STEL	750 ppm	Table A4
ACETONE	OSHA	TWA, Vacated	750 ppm	
ACETONE	OSHA	TWA	1000 ppm	Table Z-1
ACETONE	OSHA	STEL, Vacated	1000 ppm	
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	300 ppm	Table Z-1
HEXANE	ACGIH	TWA	50 ppm	Skin Notation*
HEXANE	OSHA	TWA, Vacated	50 ppm	Table Z-1A
HEXANE	OSHA	TWA	500 ppm	Table Z-1A
HEXANE (ISOMERS OTHER THAN N-HEXANE)	ACGIH	TWA	500 ppm	
HEXANE (ISOMERS OTHER THAN N-HEXANE)	ACGIH	STEL	1000 ppm	
PROPANE	ACGIH	TWA	2500 ppm	
PROPANE	OSHA	TWA	1000 ppm	Table Z-1

* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION VIIII – PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Aerosol
Odor, Color, Grade:	clear, sweet fruity odor
General Physical Form:	Gas aerosol
Autoignition temperature	*No Data Available*
Flash Point	-42.00 ºF [*Test Method:* Tagliabue Closed Cup]
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
Boiling point	*Not Applicable*
Vapor Density	2.97 [*Ref Std:* AIR=1]
Specific Gravity	0.726 [*Ref Std:* WATER=1]
pH	*No Data Available*
Melting point	*No Data Available*
Solubility in Water	Nil
Evaporation rate	1.90 [*Ref Std:* ETHER=1]
Hazardous Air Pollutants	0.4 % weight [*Test Method:* Calculated]
Hazardous Air Pollutants	0.016 lb HAPS/lb solids

Hazardous Air Pollutants	0.02 lb HAPS/gal [*Test Method:* Calculated]
Volatile OrganicCompounds	Approximately 51 % [*Test Method:* calculated SCAQMD rule 443.1]
Percent volatile	<=75 % weight
VOC Less H2O & Exempt Solvents	468 g/l
Viscosity	*Not Applicable*

SECTION X – STABILITY AND REACTIVITY

Stability:
Stable.
Materials and Conditions to Avoid:
Heat
Hazardous Polymerization:
Hazardous polymerization will not occur.
Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

SECTION XI – TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicological Information
Not determined.

Chemical Fate Information
Not determined.

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Incinerate uncured product in a permitted hazardous waste incinerator. Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Facility must be capable of handling aerosol cans. The facility should be equipped to handle gaseous waste. Dispose of empty product containers in a sanitary landfill.
RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION XIV – TRANSPORT INFORMATION

UN number:
UN1950
ID Number(s):
62-4977-0926-1, 62-4977-0927-9, 62-4977-0928-7, 62-4977-0929-5, 62-4977-0939-4, 62-4977-2926-9, 62-4977-2928-5, 62-4977-2929-3, 62-4977-4026-6, 62-4977-4030-8, 62-4977-4830-1, 62-4977-4835-0, 62-4977-4840-0, 62-4977-4845-9, 62-4977-4925-9, 62-4977-4926-7, 62-4977-4927-5, 62-4977-4928-3, 62-4977-4930-9, 62-4977-4931-7, 62-4977-4932-5, 62-4977-4933-3, 62-4977-4935-8, 62-4977-4937-4, 62-4977-4938-2, 62-4977-4939-0

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION XV – REGULATORY INFORMATION

US Federal Regulations;
311/312 Hazard Categories:
Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard – Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
CYCLOHEXANE	110-82-7	3 - 7

This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	C.A.S. No	Regulation	Status
HEXANE	110-54-3	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
CYCLOHEXANE	110-82-7	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
ACETONE	67-64-1	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable

State Regulations:

Chemical Inventories

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are in compliance with the chemical notification requirements of TSCA.

International Regulations

This material contains one or more ingredients that may be regulated by the International Traffic in Arms Regulation (ITAR), an export control of US military technology and chemicals. Prior to export of this material or any product containing this material, determine whether a proper license from the Department of State must be obtained. See 22CFR 120-130 for any specific requirements.

Non hazardous according to WHMIS criteria.

WHMIS: Non-hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION XVI – ADDITIONAL INFORMATION

NFPA Hazard Classification

Health: 2 **Flammability:** 4 **Reactivity:** 0 **Special Hazards:** None

Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 **Flammability:** 4 **Reactivity:** 0 **Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS(r)) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:
Section 3: Potential effects from skin contact information was modified.
Section 3: Potential effects from inhalation information was modified.
Section 3: Potential effects from ingestion information was modified.
Section 7: Handling information was modified.
Section 8: Eye/face protection information was modified.
Section 8: Skin protection information was modified.
Section 13: Waste disposal method information was modified.
Section 2: Ingredient information was modified.
Section 14: ID Number(s) was modified.
Section 15: Inventories information was modified.
Section 8: Exposure guidelines information was modified.
Section 12: Ecotoxicological information was added.
Section 12: Chemical Fate information was added.
Section 3: Potential effects from inhalation comment was deleted.

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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