1. Product and company identification

Product identifier

Trade name: Airtac 2

Relevant identified uses of the substance or mixture and uses advised against

General use: Temporary spray adhesive
For industrial purposes only

Details of the supplier of the safety data sheet

Company name: Airtech International, Inc.
Street/POB-No.: 5700 Skylab Road
Postal Code, city: US Huntington Beach, CA 92647
E-mail: airtech@airtechintl.com
Telephone: +1 714.899.8100
Telefax: +1 714.899.8179

Dept. responsible for information:
Telephone: + 1 714.899.8100
E-mail: airtech@airtechintl.com

Additional information: Airtech Europe Sarl
Zone industrielle Haneboesch
L – 4562 Differdange
Luxembourg
E-mail: sales@airtech.lu
Website: www.airtech.lu
Telephone: +352 582.282

Tygavac Advanced Materials Ltd.
The Causeway
Broadway Business Park
Chadderton, Oldham
OL9 9XD United Kingdom
E-mail: sales@tygavac.co.uk
Website: www.tygavac.co.uk
Telephone: + 44 161.947.1610

Airtech Asia Ltd. Ltd.
888 Airtech Avenue
Huangtai Industrial Development Center
Xiaozhan Country, Jinnan District
Tianjin, China 300353
E-mail: airtechasia@airtechintl.com
Website: www.airtech.asia
Telephone: +86 22.8622.9800

Airtech International, Inc.
5700 Skylab Road
Huntington Beach, CA 92647, USA
E-mail: airtech@airtechintl.com
Website: www.airtechonline.com
Telephone: +1 714.899.8100

Emergency phone number

CHEMTREC EMERGENCY PHONE:
International: +1 703-741-5970

2. Hazards identification

Emergency overview

Appearance: Form: Aerosol
Color: white up to brownish

Odor: sweet, fruity

Classification: Aerosol 1; Eye Irritation 2A; Toxic to Repropduction 2;
Specific Target Organ Toxicity (Single Exposure) 3;
Specific Target Organ Toxicity (Repeated Exposure) 2; Aquatic toxicity - chronic 2;

Hazard symbols:

Signal word: **Danger**

Hazard statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of damaging fertility.
May cause damage to nervous system through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.
Repeated exposure may cause skin dryness or cracking.

Precautionary statements:
Keep out of reach of children.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Do not breathe fume/gas/mist/vapors/spray.
Avoid release to the environment.
Wear protective gloves.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container to hazardous or special waste collection point.

WHMIS:

A - Compressed Gas
B5 - Flammable Aerosol
D1B - Toxic Materials; Immediate and Serious Effects

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Do not expose to high temperature. Danger of bursting and explosion.
In use, may form flammable/explosive vapor-air mixture.
Higher doses may have a narcotic effect.
see section 11: Toxicological information

3. Composition / Information on ingredients

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 107-83-5	Hexane, mixture of isomers (containing < 5 % n-hexane (110-54-3))	< 16 %	Flammable Liquid 2. Skin Irritation 2. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - chronic 2.
CAS 67-64-1	Acetone	20 - 30 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 74-98-6	Propane	15 - 25 %	Flammable Gas 1.
CAS 110-82-7	Cyclohexane	10 - 20 %	Flammable Liquid 2. Skin Irritation 2. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 109-66-0	n-Pentane	< 2 %	Flammable Liquid 2. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - chronic 2.
CAS 110-54-3	n-Hexane	< 5 %	Flammable Liquid 2. Skin Irritation 2. Toxic to Repropduction 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1. Aquatic toxicity - chronic 2.

Additional information: The maximum workplace exposure limits are, where necessary, listed in section 8.
Contains Limestone.

4. First aid measures

General information: If you feel unwell, seek medical advice (show the label where possible).

In case of inhalation: Provide fresh air. Put victim at rest and keep warm.
Seek medical treatment in case of troubles.

Following skin contact: Change contaminated clothing.
Remove residues with soap and water. Do not use solvents or thinners. Subsequently consult physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
Subsequently consult an ophthalmologist.

Most important symptoms and effects, both acute and delayed

After resorption: CNS disorders, unconsciousness, pain.
Reaction time and coordination may be impaired.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:
-45.6 °C (c.c.)

Auto-ignition temperature: no data available

Suitable extinguishing media:
Sand, carbon dioxide, extinguishing powder

Extinguishing media which must not be used for safety reasons:
Water

Specific hazards arising from the chemical

Extremely flammable aerosol. Vapors form potentially explosive mixtures with air, which are heavier than air. Air-Vapor mixture may travel great distances at floor level and lead to backflash when exposed to an ignition source.
In case of fire may be liberated: aldehydes, ketone, carbon monoxide and carbon dioxide, hydrocarbons.

Protective equipment and precautions for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Container under pressure. Do not expose to high temperature. Danger of bursting and explosion.
Cool endangered containers with water spray and, if possible, remove from danger zone.
Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

6. Accidental release measures

Personal precautions: Remove all sources of ignition. Keep unprotected people away. Evacuate area.
Do not breathe vapor or spray. Avoid contact with skin and eyes.
Wear protective equipment.

Environmental precautions:
Do not allow to enter into ground-water, surface water or drains.
If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

Methods for clean-up: Vapors form potentially explosive mixtures with air, which are heavier than air. Air-Vapor mixture may travel great distances at floor level and lead to backflash when exposed to an ignition source.
Provide adequate ventilation. Use only spark proof tools.
Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder.
Store in special closed containers and dispose of according to ordinance.

Additional information: Take precautionary measures against static discharges.

7. Handling and storage

Handling

Advices on safe handling: Avoid contact with skin and eyes.
Do not open or incinerate, even when empty. Do not spray into flames or on incandescent objects.
Provide good ventilation and/or an exhaust system in the work area.

Precautions against fire and explosion:
Do not heat spray cans over 50 °C.
Forms explosive mixtures with air. Use only spark proof tools.
Keep away from sources of ignition. - No smoking.
Take precautionary measures against static discharges.

Storage

Requirements for storerooms and containers:
Keep in a cool, well-ventilated place. Keep container dry.
Protect from heat and direct sunlight.

Hints on joint storage: Do not store together with: Oxidizing agents, acids

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
107-83-5	Hexane, mixture of isomers (containing < 5 % n-hexane (110-54-3))	Canada, Alberta: OEL 15 min	3500 mg/m³; 1000 ppm
		Canada, Alberta: OEL 8 hour	1760 mg/m³; 500 ppm
67-64-1	Acetone	Canada, Alberta: OEL 15 min	1800 mg/m³; 750 ppm
		Canada, Alberta: OEL 8 hour	1200 mg/m³; 500 ppm
		Canada, BC: OEL STEL	500 ppm
		Canada, BC: OEL TWA	250 ppm
		Canada, Québec: VECD	2380 mg/m³; 1000 ppm
		Canada, Québec: VEMP	1190 mg/m³; 500 ppm
		USA: ACGIH: STEL	500 ppm
		USA: ACGIH: TWA	250 ppm
		USA: NIOSH: TWA	590 mg/m³; 250 ppm
		USA: OSHA: TWA	2400 mg/m³; 1000 ppm
74-98-6	Propane	Canada, Alberta: OEL 8 hour	1000 ppm
		Canada, Québec: VEMP	1800 mg/m³; 1000 ppm
		USA: NIOSH: TWA	1800 mg/m³; 1000 ppm
		USA: OSHA: TWA	1800 mg/m³; 1000 ppm
110-82-7	Cyclohexane	Canada, Alberta: OEL 8 hour	344 mg/m³; 100 ppm
		Canada, BC: OEL TWA	100 ppm
		Canada, Québec: VEMP	1030 mg/m³; 300 ppm
		USA: ACGIH: TWA	344 mg/m³; 100 ppm
		USA: NIOSH: TWA	1050 mg/m³; 300 ppm
		USA: OSHA: TWA	1050 mg/m³; 300 ppm
1317-65-3	Limestone	Canada, Alberta: OEL 8 hour	10 mg/m³
		Canada, BC: OEL STEL	20 mg/m³ inhalable fraction
		Canada, BC: OEL TWA	10 mg/m³ inhalable fraction
		Canada, BC: OEL TWA	3 mg/m³ respirable fraction
		Canada, Québec: VEMP	10 mg/m³ (inhalable fraction)
		USA: NIOSH: TWA	10 mg/m³ inhalable fraction
		USA: NIOSH: TWA	5 mg/m³ (respirable fraction)
		USA: OSHA: TWA	15 mg/m³ inhalable fraction
		USA: OSHA: TWA	5 mg/m³ (respirable fraction)
109-66-0	n-Pentane	Canada, Québec: VEMP	350 mg/m³; 120 ppm
		NIOSH: Ceiling	1800 mg/m³; 610 ppm
		USA: NIOSH: TWA	350 mg/m³; 120 ppm
110-54-3	n-Hexane	Canada, Alberta: OEL 8 hour	176 mg/m³; 50 ppm
		Canada, BC: OEL TWA	20 ppm (May be absorbed through the skin.)
		Canada, Québec: VEMP	176 mg/m³; 50 ppm
		USA: ACGIH: TWA	176 mg/m³; 50 ppm (May be absorbed through the skin.)
		USA: NIOSH: TWA	180 mg/m³; 50 ppm
		USA: OSHA: TWA	1800 mg/m³; 500 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-64-1	Acetone	USA: ACGIH-BEI, urine	50 mg/L	acetone	end of exposure or end of shift
110-54-3	n-Hexane	USA: ACGIH-BEI, urine	0.4 mg/L	2,5-Hexanedion in urine	end of shift at end of workweek

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.
Take precautionary measures against static discharges.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Protective clothing, solvent-resistant.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: nitrile rubber-Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
Use filter against vapors of low boiling organic substances according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

The following applies to Propane in general:
If the concentration is exceeded, closed-circuit breathing apparatus must be used!

General hygiene considerations:

Separate storage of work clothes.
Avoid contact with skin and eyes. Do not breathe vapor or spray.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.
Take off immediately all contaminated clothing.
Keep away from food, drink and animal feedingstuffs.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Form: Aerosol
Color: white up to brownish

Odor: sweet, fruity

Odor threshold: no data available

pH value: no data available

Melting point/freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point/flash point range: -45.6 °C (c.c.)

Evaporation rate: no data available

Flammability: no data available

Explosion limits: LEL (Lower Explosion Limit): 1.10 Vol-%
UEL (Upper Explosive Limit): 12.80 Vol-%

Vapor pressure:	no data available
Vapor density:	no data available
Density:	at 20 °C: 0.726 g/mL
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Thermal decomposition:	no data available
Solid content:	
Additional information:	Relative vapor density at 20 °C (air=1): 2,97 Evaporation rate (ether = 1): 1,90

10. Stability and reactivity

Reactivity: Extremely flammable aerosol.
Vapors may form explosive mixtures with air.

Chemical stability: Product is stable under normal storage conditions.

Possibility of hazardous reactions
Container under pressure. Do not expose to high temperature. Danger of bursting and explosion.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect from direct exposure to sunlight and temperatures exceeding 50 °C.

Incompatible materials: Oxidising agent, acids

Hazardous decomposition products:
In case of fire may be liberated: aldehydes, ketone, carbon monoxide and carbon dioxide, hydrocarbons

Thermal decomposition: no data available

11. Toxicological information

Toxicological tests

Acute toxicity:
LC50 Rat, inhalative, vapor: > 18 mg/L/4h (n-Pentane)
LC50 Rat, inhalative, dust: 3 mg/L/4h (Limestone)

Toxicological effects:

Acute toxicity (oral): Based on available data, the classification criteria are not met. ATEmix calculated (oral): >5000 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met. ATEmix calculated (dermal): >5000 mg/kg

Acute toxicity (inhalative): Lack of data. ATEmix calculated (inhalative): >50 mg/L

Skin corrosion/irritation: Based on available data, the classification criteria are not met. on basis of test data (T-1057)

Eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Toxic to Repropduction 2 = Suspected of damaging fertility.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) 2 = May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Lack of data.
Not required: The product is a foam aerosol.

Carcinogenic, germ cell mutagen and reproduction effects:

Repr. Cat. 3 - Possible risk of impaired fertility.

Symptoms

Effects resulting from repeated or prolonged exposure:
liver damage, damage of kidneys.
Peripheral nervous disorders (neuralgias, "pins and needles") with considerable pain, tremors and amyosthenia.
In case of inhalation:
Narcotic effect in case of higher doses or prolonged exposure. May be harmful if inhaled. May cause respiratory irritation. May cause damage to organs.
Inhalation of the product may cause giddiness, mild dizziness or headache. hoarseness, cough
In case of ingestion: pain, vomiting, diarrhea, nausea. May cause damage to organs.
After contact with skin: Upon direct contact with skin may cause itching and redness.
After eye contact: Eye contact may cause irritation, redness, tearing or blurry vision.

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Mobility in soil

no data available

Persistence and degradability

Further details: no data available

Additional ecological information

Volatile organic compounds (VOC):
< 69 % by weight = 542 g/L

General information: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Discharge into the environment must be avoided.

13. Disposal considerations

Product

Recommendation: 16 05 04 = Dangerous materials containing gases in pressure containers/Aerosol
Do not open with force or incinerate, even when empty.
Dispose of waste according to applicable legislation. Do not dispose of with household waste. This material and its container must be disposed of as hazardous waste.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.

14. Transport information

USA: Department of Transportation (DOT)

Identification numbers:	UN1950
Proper shipping name:	UN 1950, AEROSOLS
DOT hazard class or division:	2.1
Label codes:	2.1
Special provisions:	N82
Packaging - Exceptions:	306
Packaging - Non-bulk:	None
Packaging - Bulk:	None
Quantity limitations - Passenger aircraft / rail:	75 kg
Quantity limitations - Cargo only:	150 kg
Vessel stowage - Location:	A
Vessel stowage - Other:	25, 87, 126

Canada: Transportation of Dangerous Goods (TDG)

UN Number:	UN1950
Shipping name:	UN 1950, AEROSOLS
TDG class:	2.1
Special provisions:	80, 107
Explosive limit and limited quantity index:	1 L
Passenger carrying road or rail index:	75 L

Sea transport (IMDG)

UN number:	1950
Proper shipping name:	UN 1950, AEROSOLS
IMDG:	Class 2, Subrisk -, see SP63
Packing Group:	-
EmS:	F-D, S-U
Special provisions:	63, 190, 277, 327, 344, 959
Limited quantities:	See SP277
EQ:	E0
Contaminated packaging - Instructions:	P207, LP02
Contaminated packaging - Provisions:	PP87, L2
IBC - Instructions:	-
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	-
Tank instructions - Provisions:	-
Stowage and handling:	SW1 SW22
Segregation:	SG69
Properties and observations:	-
Marine pollutant:	Yes
Segregation group:	none

Air transport (IATA)

UN/ID number:	1950
Proper shipping name:	UN 1950, AEROSOLS, flammable
ICAO/IATA:	Class 2.1
Hazard:	Flamm. gas
EQ:	E0
Passenger Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special Provisioning:	A145 A167 A802
ERG:	10L

15. Regulatory information

National regulations - Canada

DSL: Not all ingredients are listed on the DSL Inventory List.

NDSL: There are ingredients listed on the NDSL Inventory List.

Limestone (CAS 1317-65-3): <1,5 %

U.S. Federal Regulations

Hexane, mixture of isomers (containing < 5 % n-hexane (110-54-3)):
TSCA Inventory: listed
TSCA HPVC: not listed

Acetone:
TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
SOCMI Chemical: yes
Other Environmental Laws:
CERCLA: RQ 5000 lbs.
RCRA Hazardous Wastes: Code U002
RCRA Groundwater Monitoring: Methods 8240 / PQL 100
NIOSH Recommendations:
Occupational Health Guideline: 0004*

Propane:
TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
Accidental Release Prevention: Threshold 10000 lbs. / Basis for listing = f
NIOSH Recommendations:
Occupational Health Guideline: 0524

Cyclohexane:
TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
SOCMI Chemical: yes
Clean Water Act:
Hazardous Substances: RQ 1000 lbs.
Other Environmental Laws:
CERCLA: RQ 1000 lbs.
RCRA Hazardous Wastes: Code U056
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0163

Limestone:
TSCA Inventory: listed; UVCB
TSCA HPVC: not listed
NIOSH Recommendations:
Occupational Health Guideline: 0090*

n-Pentane:
TSCA Inventory: listed; EPA flags T
TSCA HPVC: not listed
Clean Air Act:
Accidental Release Prevention: Threshold 10000 lbs. / Basis for listing = g
NIOSH Recommendations:
Occupational Health Guideline: 0486

n-Hexane:
TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
Hazardous Air Pollutants: Code XOV
SOCMI Chemical: yes
Other Environmental Laws:
CERCLA: RQ 5000 lbs.
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0322

National regulations - EC member states

Labeling (67/548/EEC or 1999/45/EC)

Code letter and hazard symbol:

F+	extremely flammable
Xn	harmful
N	dangerous for the environment

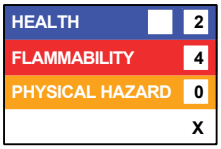
16. Other information

Text for labeling: Contains < 16 % Hexane, mixture of isomers (containing < 5 % n-hexane (110-54-3)), 20 - 30 % Acetone, 15 - 25 % Propane, 10 - 20 % Cyclohexane, < 2 % n-Pentane, < 5 % n-Hexane. Safety data sheet available on request.

Hazard rating systems:

NFPA Hazard Rating:
Health: 2 (Moderate)
Fire: 4 (Severe)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 2 (Moderate)
Flammability: 4 (Severe)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor



Reason of change: Changes in section 1: General revision

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.