1. Product and company identification

Product identifier

Trade name: Airtac 2 Mega

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.
5700 Skylab Road
Huntington Beach, CA 92647
E-mail: airtech@airtechintl.com
Website: www.airtechonline.com
Telephone: +1 714.899.8100
Department responsible for information:
Telephone: +1 714.899.8100
E-mail: airtech@airtechintl.com

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

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

Airtech Asia Ltd.
No. 161 of Anyuan Rd
Chagugang County
Wuqing District
301721, Tianjin, P.R. China
Website: www.airtech.asia
Telephone: +86 22 8862 9800
Telefax:: +86 22 8862 9900
Department responsible for information:
Telephone: +86 22 8862 9800
E-mail: airtech.asia@airtechasia.com.cn

Emergency phone number

CHEMTREC EMERGENCY PHONE:
Within USA/Canada: 1-(800)424-9300
International: +1 703-741-5970

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: Aerosol
Color: amber

Odor: hydrocarbons

Classification: Flammable Aerosol -
Category 1; Compressed Gas; Specific Target Organ Toxicity (Single Exposure) -
Category 3; Aquatic toxicity - chronic - Category 2;

Hazard symbols:

Signal word: **Danger**

Hazard statements:
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

Precautionary statements:
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.
Avoid breathing vapors/spray.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Store in a well-ventilated place.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

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

Hazards not otherwise classified

Heating will lead to pressure increase: Danger of bursting and explosion.
In use, may form flammable/explosive vapor-air mixture.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization:
Mixture containing the substances listed below:

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 64742-49-0	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	30 - 60 %	Flammable Liquid - Category 2. Specific Target Organ Toxicity (Single Exposure) - Category 3. Aspiration Toxicity - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 109-66-0	n-Pentane	5 - 10 %	Flammable Liquid - Category 1. Specific Target Organ Toxicity (Single Exposure) - Category 3. Aspiration Toxicity - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 68476-85-7	Petroleum gases, liquefied	10 - 30 %	Flammable Gas - Category 1. Liquefied Gas.
CAS 75-37-6	1,1-Difluoroethane	10 - 30 %	Flammable Gas - Category 1. Liquefied Gas.

Additional information: Information about Petroleum gases, liquefied:
Contains < 0.1 % 1,3-Butadiene.

4. First aid measures

General information: Move victim to fresh air. First aider: Pay attention to self-protection!
If medical advice is needed, have product container or label at hand.

In case of inhalation: Provide fresh air. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. Put victim at rest and keep warm. Seek medical attention.

Following skin contact: Remove residues with soap and water. Take off contaminated clothing and wash it before reuse. Do not use solvents or thinners. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.

After swallowing: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Danger of aspiration. Immediately get medical attention.

Most important symptoms/effects, acute and delayed

May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.
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:
<= -76 °F (propellant)

Auto-ignition temperature:
No data available

Suitable extinguishing media:
Water spray jet, alcohol resistant foam, carbon dioxide, dry chemical powder

Extinguishing media which must not be used for safety reasons:
Full water jet

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: Nitrogen oxides (NOx), traces of incompletely burned carbon compounds, carbon monoxide and carbon dioxide

Protective equipment and precautions for firefighters:
Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Container under pressure. Heating will lead to pressure increase: 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.

6. Accidental release measures

Personal precautions: Eliminate all ignition sources if safe to do so. Provide adequate ventilation. Keep unprotected people away. Evacuate area. Avoid breathing vapors/spray. Avoid contact with skin and eyes. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

Methods for clean-up: Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Use explosion-proof equipment and non-sparking tools/utensils. Take precautionary measures against static discharges.

7. Handling and storage

Handling

Advices on safe handling: Avoid breathing vapors/spray.
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. Do not spray into eyes or onto the skin.
Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse.

Precautions against fire and explosion:

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 sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Store containers in upright position.

Hints on joint storage: Do not store together with: Strong oxidizing agents, strong alkalis, strong acids

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
109-66-0	n-Pentane	USA: ACGIH: TWA USA: NIOSH: Ceiling USA: NIOSH: TWA USA: OSHA: TWA	2950 mg/m³; 1000 ppm 1800 mg/m³; 610 ppm 350 mg/m³; 120 ppm 2950 mg/m³; 1000 ppm
68476-85-7	Petroleum gases, liquefied	USA: NIOSH: TWA USA: OSHA: TWA	1800 mg/m³; 1000 ppm 1800 mg/m³; 1000 ppm

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.
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: PE/PA/PE - Layer thickness: > 0.06 mm
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 type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Separate storage of work clothes. Avoid breathing vapors/spray.
When using do not eat or drink.
Wash hands before breaks and after work.
Take off contaminated clothing and wash it before reuse. Do not spray into eyes or onto the skin.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: Aerosol
Color: amber

Odor: hydrocarbons

Odor threshold: No data available

pH:	7 (solution, concentrated)
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	95 °F (n-Pentane)
Flash point/flash point range:	<= -76 °F (propellant)
Evaporation rate:	No data available
Flammability:	Extremely flammable aerosol.
Explosion limits:	LEL (Lower Explosion Limit): 1.40 Vol-% (propellant) UEL (Upper Explosive Limit): 10.90 Vol-% (propellant)
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: 0.8 g/mL (liquid)
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity, dynamic:	at 68 °F: 200 - 600 mPa*s (liquid)
Viscosity, kinematic:	at 68 °F: 250 - 760 mm²/s (liquid)
Explosive properties:	Vapors may form explosive mixtures with air.
Oxidizing characteristics:	not oxidising

10. Stability and reactivity

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

Chemical stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
Pressurised container: May burst if heated.

Conditions to avoid:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Incompatible materials:
Strong oxidizing agents, strong acids, alkalis

Hazardous decomposition products:
Carbon monoxide and carbon dioxide

Thermal decomposition:
No data available

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

Skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Effects on or via lactation: Lack of data.

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

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Symptoms

In case of inhalation: Narcotic effect in case of higher doses or prolonged exposure. Product may cause headaches, dizziness or troubles of the central nervous system. chest pressure, chest pain, cough. Leads to unconsciousness in high concentrations.
In case of ingestion:
Dizziness, headache, weakness. intoxication. Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
After contact with skin: Repeated exposure may cause skin dryness or cracking.
After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):
max. 64 % by weight = 512 g/L

General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation: 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.

Package

Recommendation: Dispose of waste according to applicable legislation.
Empty carefully and completely, if possible. Handle empty containers with care.
Incineration may cause explosion.

14. Transport information

14.2 UN proper shipping name

ADR/RID, IMDG: UN 1950, AEROSOLS
IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

Transport hazard class(es)

ADR/RID: Class 2, Code: 5F
IMDG: Class 2, Subrisk -, see SP63
IATA-DGR: Class 2.1

Packing group

ADR/RID, IATA-DGR: not applicable
IMDG: -

Environmental hazards

Marine pollutant: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

USA: Department of Transportation (DOT)

Identification number: UN1950
Proper shipping name: UN 1950, AEROSOLS
Hazard class or Division: 2.1
Labels: 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

Sea transport (IMDG)

UN number:	UN 1950
Proper shipping name:	UN 1950, AEROSOLS
Class or division, Subsidary risk:	Class 2, Subrisk -, see SP63
Packing Group:	-
EmS:	F-D, S-U
Special provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantities:	See SP277
Excepted quantities:	E0
Package - Instructions:	P207, LP200
Package - 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:	UN 1950
Proper shipping name:	UN 1950, AEROSOLS, FLAMMABLE
Class or division, Subsidary risk:	Class 2.1
Hazard label:	Flamm. gas
Excepted Quantity Code:	E0
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special provisions:	A145 A167 A802
Emergency Response Guide-Code (ERG):	10L

15. Regulatory information

National regulations - U.S. Federal Regulations

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane:	TSCA Inventory: listed; UVCB TSCA HPVC: not listed
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
Petroleum gases, liquefied:	TSCA Inventory: listed; UVCB TSCA HPVC: not listed NIOSH Recommendations: Occupational Health Guideline: 0372
1,1-Difluoroethane:	TSCA Inventory: listed TSCA HPVC: not listed Clean Air Act: Accidental Release Prevention: Threshold 10000 lbs. / Basis for listing = f

National regulations - U.S. State Regulations

1,1-Difluoroethane: California Prop 65 List: None

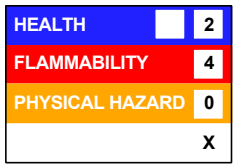
16. Other information

Text for labeling: Contains 30 - 60 % Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane, 5 - 10 % n-Pentane, 10 - 30 % Petroleum gases, liquefied, 10 - 30 % 1,1-Difluoroethane. 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



Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL: Occupational Exposure Limit Value
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
CNS: Central Nervous System
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EU: European Union
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit
CNS: Central Nervous System

Department issuing data sheet

Contact person: see section 1: Department responsible for information

This data sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, and which additional precautions may be necessary. All health and safety information contained in this data sheet should be provided to your employees and customers. It is your responsibility to develop appropriate workplace instructions and training programs for employees.

As the conditions and methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. All statements or suggestions are made without warranty, expressed or implied, regarding accuracy of information, the hazards connected with the use of the product or the results to be obtained from the use thereof.