

## 1. Product and company identification

### Product identifier

Trade name: Release Films  
Wrightlon® 5200, A4000, A4000 LFST, Airtech MR1/MR2, RF242, RF260, TF125,  
Wrightlon® 4500\*

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

General use: Article: Release Film

### 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](mailto:airtech@airtechintl.com)  
Website: [www.airtechonline.com](http://www.airtechonline.com)  
Telephone: +1 714.899.8100  
Department responsible for  
information:  
Telephone: +1 714.899.8100  
E-mail: [airtech@airtechintl.com](mailto:airtech@airtechintl.com)

Tygavac Advanced Materials Ltd.  
The Causeway  
Broadway Business Park  
Chadderton, Oldham  
OL9 9XD United Kingdom  
Website: [www.tygavac.co.uk](http://www.tygavac.co.uk)  
Telephone: +44 161.947.1610  
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Airtech Europe Sarl  
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Website: [www.airtech.lu](http://www.airtech.lu)  
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Airtech Asia Ltd.  
No. 161 of Anyuan Rd  
Chagugang County  
Wuqing District  
301721, Tianjin, P.R. China  
Website: [www.airtech.asia](http://www.airtech.asia)  
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Department responsible for information:  
Telephone: +86 22 8862 9800  
E-mail: [airtech.asia@airtechasia.com.cn](mailto: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: Form: solid  
Color: varying  
Odor: odorless  
Classification: Article not subject to hazard labelling or classification.

### Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Hazards not otherwise classified**

Toxic fumes may be emitted at elevated temperatures. Do not breathe vapor. Inhalation of fumes from burning or heating may cause polymer fume fever, a temporary flu-like illness with fever and chills. Processing, e.g. by cutting, sawing or grinding, can produce particles and dust. Avoid inhalation of dusts, as even inert dusts may functionally affect respiratory organs.

see section 11: Toxicological information

**3. Composition / Information on ingredients**

Chemical characterization:

Article: Thermoplastic film

\* Hazardous ingredients: applies only to WL4500

Relevant ingredients:

| CAS No.      | Designation           | Content | Classification   |
|--------------|-----------------------|---------|--|
| CAS 127-19-5 | N,N-Dimethylacetamide | < 1 %   | Acute Toxicity - dermal - Category 4.<br>Acute Toxicity - inhalative - Category 4.<br>Eye Irritation - Category 2A. Reproductive toxicant - Category 1B. |

**4. First aid measures**

|                         |  |
|-------------------------|--|
| In case of inhalation:  | In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. If the casualty has difficulty breathing, call a doctor immediately.                                       |
| Following skin contact: | Remove residues with soap and water. After contact with molten product, cool skin area rapidly with cold water. Do not peel solidified product off the skin. Seek medical attention.                                       |
| After eye contact:      | In the event of irritation from processing vapors: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an ophthalmologist. |
| After swallowing:       | Not a probable route of exposure.<br>In the case of the formation of dust: Rinse mouth. Seek medical treatment in case of troubles.  |

**Most important symptoms/effects, acute and delayed**

In case of inhalation:

Inhalation of dust may cause irritation of the respiratory system. Inhalation of fumes from burning or heating may cause polymer fume fever, a temporary flu-like illness with fever and chills. The following symptoms may occur: Irritation of nose, throat, lung cough, discomfort, shortage of breath, headache, dizziness, nausea, vomiting. Symptoms usually appear after 2 hours and decline within the next 36 to 48 hours. In case of prolonged exposure: Possible danger of damage to liver and kidneys.

After contact with skin: Thermal decomposition products or aerosols can cause irritation. Other symptoms: Itching redness of the skin and oedema (swelling).

The melted product can cause severe burns.

After eye contact:

Process vapors can irritate the eyes. Dust contact with the eyes can lead to mechanical irritation.

**Information to physician**

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

No data available

Auto-ignition temperature:

No data available

Suitable extinguishing media:

Water spray jet, dry chemical powder, foam, carbon dioxide

Extinguishing media which must not be used for safety reasons:

Full water jet.

### Specific hazards arising from the chemical

This material is combustible, but will not ignite readily. Toxic fumes may be emitted at elevated temperatures.

In case of fire may be liberated: Hydrogen fluoride, Carbonyl difluoride, Tetrafluoroethylene, Hexafluoropropylene, Perfluoroisobutylene, Carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Seal off endangered area. Cool endangered containers with water spray and, if possible, remove from danger zone. Use a water fog to control vapors. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.

## 6. Accidental release measures

Personal precautions: Handle in accordance with good industrial hygiene and safety practice.

At processing: Avoid the formation of aerosol/vapors. Avoid dust formation. Avoid inhalation and contact with skin and eyes. Wear appropriate protective equipment. Keep unprotected people away. Ensure adequate ventilation, especially in confined areas.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.

Methods for clean-up: Take up mechanically, placing in appropriate containers for disposal. Dispose of waste according to applicable legislation.

## 7. Handling and storage

### Handling

Advices on safe handling: Handle in accordance with good industrial hygiene and safety practice.

At processing: Provide adequate ventilation, and local exhaust as needed. Avoid dust formation. Avoid the formation of aerosol/vapors. Avoid inhalation and contact with skin and eyes. Wear appropriate protective equipment. Keep unprotected people away. When using do not eat, drink or smoke.

Precautions against fire and explosion:

Take standard precautions to prevent fire.

### Storage

Requirements for storerooms and containers:

Keep in a cool place. Keep container dry. Protect from direct sunlight. Keep away from incompatible materials. Store at room temperature.

Hints on joint storage: Incompatible materials: Strong bases, strong acids, strong oxidizing agents.

Keep away from food and drinks.



## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

| CAS No.  | Designation           | Type            | Limit value   |
|----------|-----------------------|-----------------|---|
| 127-19-5 | N,N-Dimethylacetamide | USA: ACGIH: TWA | 10 mg/m <sup>3</sup><br>(Dust limit value, inhalable fraction)      |
|          |                       | USA: ACGIH: TWA | 3 mg/m <sup>3</sup><br>(Dust limit value, respirable fraction)      |
|          |                       | USA: OSHA: TWA  | 15 mg/m <sup>3</sup><br>(Dust limit value, inhalable fraction)      |
|          |                       | USA: OSHA: TWA  | 5 mg/m <sup>3</sup><br>(Dust limit value, respirable fraction)      |
|          |                       | USA: ACGIH: TWA | 10 ppm<br>(may be absorbed through the skin)                        |
|          |                       | USA: NIOSH: TWA | 35 mg/m <sup>3</sup> ; 10 ppm<br>(may be absorbed through the skin) |
|          |                       | USA: OSHA: TWA  | 35 mg/m <sup>3</sup> ; 10 ppm<br>(may be absorbed through the skin) |

Biological limit values:

| CAS No.  | Designation           | Type                  | Limit value        | Parameter         | Sampling                        |
|----------|-----------------------|-----------------------|--------------------|-------------------|---------------------------------|
| 127-19-5 | N,N-Dimethylacetamide | USA: ACGIH-BEI, urine | 30 mg/g creatinine | N-Methylacetamide | end of shift at end of workweek |

### Engineering controls

Provide good ventilation and/or an exhaust system in the work area.  
In case of development of vapors or dust (at processing): Use local exhaust.  
See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

**Eye/face protection:** At processing (recommended): Safety glasses in accordance with OSHA 29 CFR: 1910.133 or ANSI Z87.1-2010.

**Skin protection:** At processing (recommended): Wear suitable protective clothing.  
Recommendation:  
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: nitrile rubber, neoprene (0.11 mm)  
Breakthrough time: >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

**Respiratory protection:** Respiratory protection is not necessary if room is well ventilated.  
At processing:  
When vapors form, use respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

**General hygiene considerations:**  
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and after work. When using do not eat, drink or smoke.  
At processing:  
Avoid contact with skin, eyes, and clothing. Do not breathe vapor. Do not breathe dust.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|  |  |
|--|--|
| Appearance:                              | Form: solid<br>Color: varying                              |
| Odor:                                    | odorless   |
| 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:           | No data available  |
| Evaporation rate:                        | No data available  |
| Flammability:                            | This material is combustible, but will not ignite readily. |
| Explosion limits:                        | No data available  |
| Vapor pressure:                          | No data available  |
| Vapor density:                           | No data available  |
| Density:                                 | No data available  |
| Water solubility:                        | insoluble  |
| Partition coefficient: n-octanol/water:  | No data available  |
| Auto-ignition temperature:               | No data available  |
| Thermal decomposition:                   | No data available  |
| Additional information:                  | No data available  |

## 10. Stability and reactivity

|                                     |   |
|-------------------------------------|---|
| Reactivity:                         | Refer to section: Possibility of hazardous reactions.   |
| Chemical stability:                 | Stable under recommended storage conditions.  |
| Possibility of hazardous reactions: | No dangerous reactions with proper and specified storage and handling   |
| Conditions to avoid:                | Keep away from heat. Protect from direct sunlight. Avoid generation of dust. Avoid the formation of aerosol/vapors.   |
| Incompatible materials:             | Strong bases, strong acids, strong oxidizing agents.  |
| Hazardous decomposition products:   | Toxic fumes may be emitted at elevated temperatures.<br>> 270 °C: Hydrogen fluoride; > 380 °C: Carbonyl difluoride, Tetrafluoroethylene, Hexafluoropropylene, Perfluoroisobutylene, 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): Lack of data.  
Acute toxicity (dermal): Lack of data.  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Lack of data.  
Serious eye damage/irritation: Lack of data.  
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: Lack of data.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): Lack of data.  
Specific target organ toxicity (repeated exposure): Lack of data.  
Aspiration hazard: Lack of data.

Other information: Toxic fumes may be emitted at elevated temperatures. Processing, e.g. by cutting, sawing or grinding, can produce particles and dust. Dust may irritate airways and cause bronchitis symptoms.

### Symptoms

In case of inhalation:  
Inhalation of dust may cause irritation of the respiratory system. Inhalation of fumes from burning or heating may cause polymer fume fever, a temporary flu-like illness with fever and chills. The following symptoms may occur: Irritation of nose, throat, lung cough, discomfort, shortage of breath, headache, dizziness, nausea, vomiting. Symptoms usually appear after 2 hours and decline within the next 36 to 48 hours. In case of prolonged exposure: Possible danger of damage to liver and kidneys.  
After contact with skin: Thermal decomposition products or aerosols can cause irritation.  
Other symptoms: Itching redness of the skin and oedema (swelling).  
The melted product can cause severe burns.  
After eye contact:  
Process vapors can irritate the eyes. Dust contact with the eyes can lead to mechanical irritation.

## 12. Ecological information

### Ecotoxicity

Effects in sewage plants: The insoluble part can be precipitated mechanically in suitable sewage treatment plants.

Further details: No data available

### Mobility in soil

No data available

### Persistence and degradability

Further details: Product is not biodegradable.





**Additional ecological information**

General information: Do not allow to penetrate into soil, waterbodies or drains.

**13. Disposal considerations****Product**

Recommendation: Disposal of fluoropolymer containing wastes must follow applicable federal, state and local regulations.  
Waste must not be mixed with domestic or industrial waste that will be incinerated unless the facilities are equipped and permitted to handle acidic combustion products. Preferred options for disposal are recycling and landfill. Incinerate only if the incinerator is fitted and permitted to scrub out hydrogen fluoride and other acidic combustion gases.

**Contaminated packaging**

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled. Do not remove label until container is thoroughly cleaned.

**14. Transport information****USA: Department of Transportation (DOT)**

Proper shipping name: Not restricted

**Sea transport (IMDG)**

Proper shipping name: Not restricted

Marine pollutant: no

**Air transport (IATA)**

Proper shipping name: Not restricted

**Further information**

No dangerous good in sense of these transport regulations.

**15. Regulatory information****National regulations - U.S. Federal Regulations**

Product: This product is an article as defined by TSCA regulations, and is exempt from TSCA inventory listing requirements.

N,N-Dimethylacetamide: NIOSH Recommendations:  
Occupational Health Guideline: 0218

**National regulations - U.S. State Regulations**

N,N-Dimethylacetamide: Idaho Air Pollutant List:  
Title 585: AAC: 1.75 - EL: 2,33 - OEL: 35 - Title 586: -  
Massachusetts Haz. Substance codes: 2,4,6  
Minnesota Haz. Substance:  
Codes: AO - Ratings: - Status: -  
Pennsylvania Haz. Substance code: -  
California Proposition 65: cancer



**National regulations - Great Britain**

Hazchem-Code: -

**16. Other information**

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)  
Fire: 1 (Slight)  
Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)  
Flammability: 1 (Slight)  
Physical Hazard: 0 (Minimal)  
Personal Protection: X = Consult your supervisor

|                 |   |
|-----------------|---|
| HEALTH          | 1 |
| FLAMMABILITY    | 1 |
| PHYSICAL HAZARD | 0 |
|                 | X |

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  
CAS: Chemical Abstracts Service  
CFR: Code of Federal Regulations  
CLP: Classification, Labelling and Packaging  
DMEL: Derived minimal effect level  
DNEL: Derived no-effect level  
EC: European Community  
EN: European Standard  
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  
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  
SVHC: Substance of Very High Concern  
TSCA: Toxic Substance Control Act  
vPvB: Very persistent and very bioaccumulative

Reason of change: General revision

**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.

