SAFETY DATA SHEETS

This SDS packet was issued with item:

071048826

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071048974

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078907862

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 1 of 7

1. Identification

Product identifier

FORMULA 2000 PLUS COMPONENT 1

Use of the substance/mixture

Cleaner

Details of the supplier of the safety data sheet

Company name: Air Techniques, Inc.
Street: 1295 Walt Whitman Road,
Place: USA Melville, NY 11747

Telephone: 516-433-7676

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

Emergency phone number: for US and Canada: 1-800 424-9300 (CHEMTREC)

2. Hazard(s) identification

Classification of the chemical

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory/skin sensitization: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:
Harmful if swallowed
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer

Suspected of damaging the unborn child

May cause damage to organs through prolonged or repeated exposure

Label elements

Signal word: Danger

Pictograms: exclamation mark; health hazard





Hazard statements

Harmful if swallowed

Causes serious eye irritation

May cause an allergic skin reaction

Suspected of causing cancer

Suspected of damaging the unborn child

May cause damage to organs through prolonged or repeated exposure

Precautionary statements

Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Do not eat, drink or smoke when using this product.

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

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Wash hands thoroughly after handling.

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Store locked up.

If swallowed: Call Call a POISON CENTER or doctor/phisician if you feel unwell. if you feel unwell.

If exposed or concerned: Get medical advice/attention.

Dispose of contents/container to in accordance with local and national regulations.

Hazards not otherwise classified

No data available.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture

Hazardous components

CAS No	Components	Quantity
62-56-6	thiocarbamide, thiourea	5 %
2809-21-4	Etidronic acid	5 %

4. First-aid measures

Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

In the event of symptoms refer for medical treatment.

After contact with skin

Remove contaminated soaked clothing immediately.

Wash off immediately with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eves

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Summon a doctor immediately.

After ingestion

Rinse out mouth and give plenty of water to drink.

Do not induce vomiting.

Call a physician immediately.

Most important symptoms and effects, both acute and delayed

DANGER!

Irritating to eyes, respiratory system and skin.

Limited evidence of a carcinogenic effect.

May cause sensitization by inhalation and skin contact.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

OSHA Hazard Communication: This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.

Indication of any immediate medical attention and special treatment needed

Treat symptoms.

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 3 of 7

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO2), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the chemical

Fire may produce: Carbon monoxide, carbon dioxide and sulphur oxides.

Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Do not breathe gases from fire and explosion.

Cool containers at risk with water spray jet.

Collect contaminated firefighting water separately, must not be discharged into the drains.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective clothing.

Environmental precautions

Do not discharge into the drains or bodies of water.

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Disposal according to regulations.

Reference to other sections

Information for disposal look up chapter 13.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Use only in well-ventilated areas.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

No special protective measures against fire required.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Keep at temperatures between 5 °C and 25 °C.

Further information on storage conditions

Store in original container.

Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Control parameters

Exposure controls

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 4 of 7

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

Avoid contact with skin, eyes and clothing.

At work do not eat, drink and smoke.

Remove soaked clothing immediately.

Eye/face protection

Tightly fitting goggles.

Hand protection

Wear protective gloves (rubber or nitrile)

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Protective clothing

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Colourless, clear Odor: Characteristic

Test method

pH-Value: 1.0 - 2.0

Changes in the physical state

Flash point: $> 100 \,^{\circ}\text{C}$ Density (at 20 $^{\circ}\text{C}$): $1.02 \,^{\circ}\text{L} = 1.04 \,^{\circ}\text{g/cm}^3$ Water solubility: Completely soluble (at 20 $^{\circ}\text{C}$)

Solubility in other solvents

Soluble in organic solvent

Other information

No data available.

10. Stability and reactivity

Reactivity

No data available.

Chemical stability

Stability: Stable

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

No data available.

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 5 of 7

Conditions to avoid

Protect from moisture.

To avoid thermal decomposition, do not overheat.

Incompatible materials

Strong acids and strong bases.

Hazardous decomposition products

Carbon monoxide, Carbon dioxide, Sulphur dioxide (SO2)

Further information

No decomposition if stored and applied as directed.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Skin and eye contact, inhalation and ingestion.

Acute toxicity

Harmful if swallowed

ATEmix calculated

ATE (inhalative aerosol) 2,453 mg/l

Acute toxicity

CAS No	Components						
	Exposure routes	Method	Dose	Species	Source		
62-56-6	thiocarbamide, thiourea						
	oral	ATE	500 mg/kg				
2809-21-4	Etidronic acid						
	oral	ATE	500 mg/kg				

Irritation and corrosivity

Causes serious eye irritation

Sensitizing effects

May cause an allergic skin reaction

Specific target organ toxicity (STOT) - single exposure

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

Severe effects after repeated or prolonged exposure

May cause damage to organs through prolonged or repeated exposure

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer (thiocarbamide, thiourea)

Suspected of damaging the unborn child (thiocarbamide, thiourea)

Carcinogenicity (NTP): listed

Carcinogenicity (IARC): listed , IARC 2B

Carcinogenicity (OSHA): Not listed

Aspiration hazard

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

12. Ecological information

Ecotoxicity

No data available.

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 6 of 7

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No data available.

Further information

Do not discharge into surface waters/groundwater.

13. Disposal considerations

Waste treatment methods

Advice on disposal

Where possible recycling is preferred to disposal.

In accordance with regulations for special waste, must be taken to a special waste disposal.

Contaminated packaging

Contaminated packagings are to be treated like the product itself.

14. Transport information

US DOT 49 CFR 172.101

<u>Proper shipping name:</u> Not regulated.

Other applicable information

Non hazardous material as defined by the transport regulations.

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All of the components are listed on the TSCA inventory.

SARA

This product contains toxic chemical(s) subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 372. Any such toxic chemical(s) are shown below.

Thiourea: (max. 5%)

16. Other information

Hazardous Materials Information Label (HMIS)

Health: *2
Flammability: 1
Physical Hazard: 0

NFPA Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0
Unique Hazard:

Changes

20

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS COMPONENT 1

Print date: 12.04.2018 Product code: 1295-2 Page 7 of 7

Revision date: 09.12.2014

Revision No: 1,0

Changes in chapter: -

Other data

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 1 of 7

1. Identification

Product identifier

FORMULA 2000 PLUS Component 2

Use of the substance/mixture

Cleaner

Details of the supplier of the safety data sheet

Company name: Air Techniques, Inc.
Street: 1295 Walt Whitman Road,
Place: USA Melville, NY 11747

Telephone: 516-433-7676

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

Emergency phone number: for US and Canada: 1-800 424-9300 (CHEMTREC)

2. Hazard(s) identification

Classification of the chemical

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory/skin sensitization: Resp. Sens. 1 Respiratory/skin sensitization: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements: Harmful if swallowed

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Causes serious eye irritation May cause an allergic skin reaction

Label elements

Signal word: Danger

Pictograms: exclamation mark; health hazard





Hazard statements

Harmful if swallowed

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Causes serious eye irritation

May cause an allergic skin reaction

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Wear respiratory protection.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Keep/Store away from combustible materials.

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 2 of 7

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

If eye irritation persists: Get medical advice/attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center/doctor.

Hazards not otherwise classified

No data available.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture

Hazardous components

CAS No	Components	Quantity
7775-27-1	Disodium peroxodisulphate	55 %
7757-82-6	Sodium sulfate	55 %

4. First-aid measures

Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

In the event of persistent symptoms receive medical treatment.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.

Refer for medical treatment.

After contact with skin

Take away immediately by mechanical means.

Wash off immediately with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eves

Rinse thoroughly with plenty of water, also under the eyelids.

Summon a doctor immediately.

After ingestion

Summon a doctor immediately.

Most important symptoms and effects, both acute and delayed

DANGER!

May cause an allergic skin reaction.

Irritating to eyes, respiratory system and skin.

OSHA Hazard Communication: This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.

Indication of any immediate medical attention and special treatment needed

Treat symptoms.

5. Fire-fighting measures

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 3 of 7

Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO2), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the chemical

Fire may produce:

Carbon monoxide, carbon dioxide, sulphur oxides.

Special protective equipment and precautions for fire-fighters

Use breathing apparatus with independent air supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation. Remove persons to safety.

Use personal protective clothing.

Environmental precautions

Clean contaminated surface thoroughly.

Do not discharge into the drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Sweep up and shovel.

Reference to other sections

Shovel into suitable container for disposal.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing.

Keep container tightly closed.

When using do not eat, drink or smoke.

Use only in thoroughly ventilated areas.

"ZH 1/34 ""Data Sheet: Polyurethane manufacture / Isocyanate (M 044)""", "UVV ""Processing of

Adhesives"" (VBG 81)"

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Use only in well-ventilated areas.

Advice on storage compatibility

Keep away from alkali

Keep away from metals

Keep away from combustible material

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Control parameters

Exposure controls

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 4 of 7

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing.

Eye/face protection

Eye wash bottle with pure water.

Tightly fitting goggles.

Hand protection

Protective glove (rubber or nitrile)

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Light protective clothing

Long sleeved clothing.

Respiratory protection

Use suitable breathing apparatus if there is inadequate ventilation.

Short term: filter apparatus, combination filter B-P3

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Powder Color: White Odor: Odourless

Test method

Changes in the physical state

Bulk density: 1100 kg/m³ Water solubility: Completely soluble

Other information

No data available.

10. Stability and reactivity

Reactivity

Do not store with combustible materials.

Chemical stability

Stability: Stable

Chemically stable.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

No data available.

Conditions to avoid

To avoid thermal decomposition, do not overheat.

To avoid thermal decomposition, do not overheat. (> 250 °C)

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 5 of 7

Incompatible materials

Reacts with: Metals, Reducing agents

Hazardous decomposition products

Carbon monoxide, carbon dioxide and sulphur oxides.

Further information

No decomposition if stored and applied as directed.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Skin and eye contact, inhalation and ingestion.

Acute toxicity

Harmful if swallowed

ATEmix calculated

ATE (inhalative aerosol) 1,208 mg/l

Acute toxicity

CAS No	Components						
	Exposure routes	Method	Dose	Species	Source		
7775-27-1	Disodium peroxodisulphate						
	oral	ATE	500 mg/kg				

Irritation and corrosivity

Causes serious eye irritation

Irritating to eyes, respiratory system and skin.

Sensitizing effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled (Disodium peroxodisulphate)

May cause an allergic skin reaction (Disodium peroxodisulphate)

May cause sensitization by inhalation and skin contact.

Specific target organ toxicity (STOT) - single exposure

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

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Carcinogenicity (NTP): Not listed
Carcinogenicity (IARC): Not listed
Carcinogenicity (OSHA): Not listed

Aspiration hazard

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

Further information

Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EC.

12. Ecological information

Ecotoxicity

No data available.

Persistence and degradability

according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 6 of 7

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

Hazardous water pollutant.

13. Disposal considerations

Waste treatment methods

Advice on disposal

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

US DOT 49 CFR 172.101

Proper shipping name: Not regulated.

Other applicable information

Non hazardous material as defined by the transport regulations.

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All of the components are listed on the TSCA inventory.

SARA

To the best of our knowledge this product contains no toxic chemicals subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 372.

16. Other information

Hazardous Materials Information Label (HMIS)

Health: *2
Flammability: 1
Physical Hazard: 0

NFPA Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0

Unique Hazard:

Changes

Revision date: 18.12.2014

Revision No: 1,0



according to 29 CFR 1910.1200(g)

FORMULA 2000 PLUS Component 2

Print date: 12.04.2018 Product code: 1295-3 Page 7 of 7

Changes in chapter: 2, 3

Other data

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions. (n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)