

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product name : PACT premier ECO Screen / PACT premier HT-96 ECO Screen

Product number : MD1-29-ECO / MD1-36-ECO

Company : Molecular Dimensions Limited  
Unit 6 Goodwin Business Park  
Willie Snaith Road  
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Suffolk  
CB8 7SQ

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**2. HAZARDS IDENTIFICATION**

**Risk advice to man and the environment**

Flammable.	Very toxic to aquatic organisms.
Toxic if swallowed.	May cause cancer.
Irritating to eyes, respiratory system and skin.	Corrosive.
Causes severe burns.	Harmful to aquatic organisms.
Contact with combustible material may cause fire.	Harmful by inhalation.
Vapours may cause drowsiness and dizziness.	May cause sensitisation.
Irritating to respiratory system.	Risk of serious damage to eyes.
Possible risk of harm to the unborn child.	Highly flammable.
Danger of serious damage to health by prolonged exposure.	
Contact with acids liberates very toxic gas. Harmful to aquatic organisms.	
Harmful if swallowed. Irritating to eyes, respiratory system and skin.	

**3. COMPOSITION/INFORMATION ON INGREDIENTS.**

Reagent	CAS-No.	EC-No.	Reagent	CAS-No.	EC-No.
Acetic acid	64-19-7	200-580-7	Potassium sodium tartrate	6381-59-5	206-156-8
Ammonium chloride	9718	None	Potassium thiocyanate	333-20-0	206-370-1
Bis-Tris propane	64431-96-5	264-899-3	Sodium acetate trihydrate	127-09-3	204-823-8
Boric acid	10043-35-3	233-139-2	Sodium bromide	7758-02-3	231-830-3
Calcium chloride dihydrate	10035-04-8	233-140-8	Sodium chloride	7647-14-5	231-598-3
Potassium phosphate dibasic	7758-11-4	231-834-5	Sodium citrate tribasic dihydrate	03/04/6132	200-675-3
Sodium phosphate dibasic dihydrate	7558-79-4	231-448-7	Sodium phosphate monobasic monohydrate	10049-21-5	231-449-2
Glycine	56-40-6	200-272-2	Sodium fluoride	7681-49-4	231-667-8
HEPES	7365-45-9	230-907-9	Sodium formate	141-53-7	205-488-0
Hydrochloric acid (HCl)	7647-01-0	231-595-7	Sodium hydroxide solution	1310-73-2	215-185-5
Imidazole	288-32-4	206-019-2	Sodium iodide	7681-82-5	231-679-3
Lithium chloride	7447-41-8	231-212-3	Sodium malonate dibasic monohydrate	26522-85-0	None
DL-Malic acid	97-67-6	202-601-5	Sodium nitrate	7631-99-4	231-554-3
Magnesium chloride hexahydrate	7791-18-6	232-094-6	Sodium propionate	137-40-6	205-290-4
MES monohydrate	4432-31-9	None	Sodium sulfate	7757-82-6	231-820-9
PEG 1500	25322-68-3	203-473-3	Succinic acid	110-15-6	203-740-4
PEG 3350	25322-68-3	None	Trizma® base (Tris)	77-86-1	201-064-4
PEG 6000	25322-68-3	None	Zinc chloride	7646-85-7	231-592-0
Potassium phosphate monobasic	7778-77-0	231-913-4			

**4. FIRST AID MEASURES**

**If inhaled**

Move person into fresh air. If breathing becomes difficult call a physician.

**In case of skin contact**

Immediately wash skin with soap and copious amounts of water.

**In case of eye contact**

Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**If swallowed**

Wash out mouth with water provided the person is conscious. Call a physician.

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## 5. FIRE-FIGHTING METHODS

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Specific hazard(s)

Emits toxic fumes when burnt.

### Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Minimise direct contact with skin or eyes and prevent inhalation of dust.

### Environmental precautions

Do not let product enter drains.

### Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal. Avoid raising dust. Ventilate area and wash spill site.

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## 7. HANDLING AND STORAGE

### Handling

Avoid inhalation. Avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated exposure.

### Storage

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

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## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear protective gloves.

#### Eye protection

Safety glasses.

#### Hygiene measures

General industrial hygiene practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form liquid

### Safety data

pH	varying due to pack contents
Melting point	varying due to pack contents
Boiling point	varying due to pack contents
Flash point	varying due to pack contents
Ignition temperature	varying due to pack contents
Lower explosion limit	varying due to pack contents
Upper explosion limit	varying due to pack contents
Water solubility	varying due to pack contents

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## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidising agents.

### Hazardous decomposition products

Formed under fire conditions - Carbon oxides, Nitrogen oxides.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

No data available.

### Oxidation and corrosion

No data available.

### Sensitisation

No data available.

### Chronic exposure

No data available.

### Potential health effects

<b>Inhalation</b>	Harmful if inhaled. Can cause respiratory tract irritation.
<b>Skin</b>	Harmful if absorbed through skin. Can cause skin irritation.
<b>Eyes</b>	Can cause eye irritation.
<b>Ingestion</b>	Harmful if swallowed.

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## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

No data available.

### Ecotoxicity effects

No data available.

### Further information on ecology

No data available.

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## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all EU and local environmental regulations.

### Contaminated packaging

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### ADR/RID

Not dangerous goods.

### IMDG

Not dangerous goods.

### IATA

Non-hazardous for air transport.

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## 15. REGULATORY INFORMATION

### Labelling according to EC Directives

Caution - substance not yet tested completely.

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## 16. OTHER INFORMATION

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Molecular Dimensions Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product.

For R&D use only. Not for drug, household or other uses.


**SAFETY DATA SHEET**

Version 2.0 Revision date 1/12/2014

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

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 Product number : MD1-37-ECO / MD1-40-ECO  
 Company : Molecular Dimensions Limited  
 Unit 6 Goodwin Business Park  
 Willie Snaith Road  
 Newmarket  
 Suffolk  
 CB8 7SQ  
 Telephone : 01638 561051  
 Fax : 01638 660674  
 Email address : [enquiries@moleculardimensions.com](mailto:enquiries@moleculardimensions.com)

**2. HAZARDS IDENTIFICATION**
**Risk advice to man and the environment**

Toxic if swallowed.	Very toxic to aquatic organisms with long lasting effects.
Irritating to eyes, respiratory system and skin.	May cause cancer.
Causes severe skin burns and eye damage.	Corrosive.
Contact with combustible material may cause fire	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Vapours may cause drowsiness and dizziness.	Fatal if inhaled.
May cause an allergic skin reaction.	May cause sensitisation.
May damage fertility or the unborn child.	Risk of serious damage to eyes.
Danger of serious damage to health by prolonged exposure.	Highly flammable liquid and vapour.
Contact with acids liberates very toxic gas.	May cause genetic defects.
	May be corrosive to metals.

**3. COMPOSITION/INFORMATION ON INGREDIENTS.**

Reagent	CAS-No.	EC-No.	Reagent	CAS-No.	EC-No.
1,2-Propanediol	57-55-6	200-338-0	MES monohydrate	145224-94-8	224-632-3
2-Propanol	603-117-00-0	200-661-7	Nickel(II) chloride hexahydrate	7791-20-0	None
Acetic acid	64-19-7	200-580-7	PEG 10000	25322-68-3	500-038-2
Ammonium acetate	631-61-8	211-162-9	PEG 1000	25322-68-3	500-038-2
Ammonium chloride	12125-02-9	235-186-4	PEG 1500	25322-68-3	500-038-2
Ammonium citrate dibasic	3012-65-5	221-146-3	PEG 20000	25322-68-3	500-038-2
Ammonium formate	540-69-2	208-753-9	PEG 200	25322-68-3	500-038-2
Ammonium nitrate	6484-52-2	229-347-8	PEG 2000 MME	9004-74-4	None
Ammonium phosphate dibasic	7783-28-0	231-987-8	PEG 300	25322-68-3	500-038-2
Ammonium phosphate monobasic	7722-76-1	231-764-5	PEG 3000	25322-68-3	500-038-2
Ammonium sulfate	7783-20-2	231-984-1	PEG 3350	25322-68-3	500-038-2
BICINE	150-25-4	None	PEG 400	25322-68-3	500-038-2
Bis-Tris	6976-37-0	230-237-7	PEG 4000	25322-68-3	500-038-2
Cadmium chloride hemi(pentahydrate)	7790-78-5	233-296-7	PEG 6000	25322-68-3	500-038-2
Calcium acetate hydrate	114460-21-8	200-580-7	PEG 8000	25322-68-3	500-038-2
Calcium chloride dihydrate	10035-04-8	233-140-8	Poly(acrylic acid sodium salt) 5100	9003-04-7	None
CAPS	1135-40-6	214-492-1	Polyvinylpyrrolidone	9003-39-8	None
Cesium chloride	7647-17-8	231-600-2	Potassium bromide	7758-02-3	231-830-3
CHES	103-47-9	203-115-6	Potassium citrate tribasic monohydrate	6100-05-6	None
Citric acid	77-92-9	201-069-1	Potassium formate	590-29-4	209-677-9
Cobalt(II) chloride hexahydrate	7791-13-1	231-589-4	Potassium nitrate	7757-79-1	231-818-8
DL-Malic acid	6915-15-7	230-022-8	Potassium phosphate monobasic	7778-77-0	231-913-4
Ethanol	64-17-5	200-578-6	Potassium thiocyanate	333-20-0	206-370-1
Ethylene glycol	107-21-1	203-473-3	Sodium acetate trihydrate	6131-90-4	None
Glycerol	56-81-5	200-289-5	Sodium chloride	7647-14-5	231-598-3
HEPES	7365-45-9	None	Sodium citrate tribasic trihydrate	6132-04-3	None
HEPES sodium salt (Sodium HEPES)	75277-39-3	None	Sodium hydroxide	1310-73-2	215-185-5
Hexylene glycol (MPD)	107-41-5	203-489-0	Sodium malonate dibasic monohydrate	26522-85-0	None
Hydrochloric acid	7647-01-0	231-595-7	Sodium phosphate dibasic dihydrate	10028-24-7	None
Imidazole	288-32-4	206-019-2	Sodium phosphate monobasic monohydrate	10049-21-5	None
Jeffamine® ED-2003	65605-36-9	None	Sodium thiocyanate	540-72-7	208-754-4
Jeffamine® M-600	83713-01-3	None	Succinic acid	110-15-6	203-740-4
Lithium chloride	7447-41-8	231-212-3	Trimethylamine N-oxide dihydrate (TMAO)	62637-93-8	214-675-6
Lithium sulfate	10102-25-7	233-820-4	Tris	77-86-1	201-064-4
Magnesium chloride hexahydrate	7791-18-6	None	Zinc acetate dihydrate	5970-45-6	209-170-2
Magnesium formate dihydrate	6150-82-9	None			
Magnesium sulfate heptahydrate	10034-99-8	None			

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#### 4. FIRST AID MEASURES

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