



# SAFETY DATA SHEET

## ABC 189 CLEANER / CONDITIONER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>TRADE NAME</b>	ABC 189 CLEANER / CONDITIONER 500-270 (1L) & 500-270-1 (60ml)
<b>Producer/importer</b>	Mega Electronics Limited
<b>Address</b>	Mega House, Grip Industrial Estate, Linton, Cambridge
<b>Country</b>	ENGLAND
<b>Postal code</b>	CB21 4XN
<b>Telephone</b>	+44 (0) 1223 893900
<b>Fax</b>	+44 (0) 1223 893894

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	2-aminoetanol	205-483-3	141-43-5	10%	Xn,20-36/37/38
2	Secondary alcohol (C12-C14) ethoxylat		84133-50-6	5%	

Legend: T+ =Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+ =Extremely flammable, F=Highly flammable, N=Dangerous for the environment

**INGREDIENT COMMENTS** ; Aqueous solution of surfactants and 2 - aminoethanol

### 3. HAZARDS IDENTIFICATION

**GENERAL** This product does not require labelling.

### 4. FIRST AID MEASURES

<b>GENERAL</b>	Remove contaminated clothing as soon as possible
<b>INHALATION</b>	Remove person to fresh air. Get medical advise if large amounts have been inhaled or the patient experiences discomfort.
<b>SKIN CONTACT</b>	Remove contaminated clothing immediately. Flush skin immediately with large amounts of water.
<b>EYE CONTACT</b>	Flush with large amounts of water (open eyelids) for at least 15 minutes. Get medical advice.
<b>INGESTION</b>	Give plenty of water or milk to drink. If swallowed, seek medical advice immediately and show this container or label.

### 5. FIRE-FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	Water, CO2, foam, dry chemical.
<b>PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS</b>	Use self-contained breathing apparatus if substance is involved in fire.
<b>OTHER INFORMATION</b>	Prevent release of fire control water to surface water or ground water.

### 6. ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Do not breathe vapour or spray
<b>ENVIRONMENTAL PRECAUTIONS</b>	Prevent discharge of significant quantities to drains. Spillage may be pumped up or absorbed with dry, inert material such as sand, earth etc.
<b>METHODS FOR CLEANING UP</b>	Mix the chemicals with an inert material (sand, vermiculite, etc) and place in a suitable container. Flush with large amounts of water to clean the area

### 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS** Do not store near acids. Containers must be kept tightly closed.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredient name	Cas nr.	Interval	ppm	mg/m3	Year	Notes
2-aminoetanol	141-43-5	8 h	3,0	8,0	2000	H

**RESPIRATORY PROTECTION** Respiratory protection may be necessary

**EYE PROTECTION** Wear goggles or face shield if there is a possibility of eye contact.

**HAND PROTECTION** Use suitable protective gloves if skin contact is possible.

**PROTECTIVE CLOTHING** Wear apron

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Solution.		
<b>Colour:</b>	Colourless.		
<b>Odour:</b>	Characteristic.		
<b>Solubility:</b>	Completely soluble in water.		
<b>Melting point/range:</b>	ca -10 C	<b>Density:</b>	1,05g/cm3
<b>Expl. limit LEL-UEL%:</b>	--	<b>Solubility in water:</b>	100%
<b>Vapour pressure:</b>	--	<b>Saturation conc.:</b>	--
<b>Decomposition temp.:</b>	--	<b>Rel. dens. sat. air (air=1):</b>	--
<b>pH solution:</b>	9	<b>Boiling point/range:</b>	ca 120 C
<b>Flash point:</b>	--	<b>pH concentrate:</b>	>10
<b>Molar weight:</b>	--	<b>Viscosity:</b>	--

## 10. STABILITY AND REACTIVITY

### MATERIALS TO AVOID

May form explosive gases in contact with: inorganic acid chlorides Exothermic reaction with strong acids

## 11. TOXICOLOGICAL INFORMATION

**INHALATION** Respiratory tract irritation

**SKIN CONTACT** Chemical burns. May cause skin irritation and / or dermatitis.

**EYE CONTACT** Highly irritating to the eyes.

**INGESTION** Burning sensation in the mouth and throat

## 12. ECOLOGICAL INFORMATION

**DEGRADABILITY** Readily biodegradable

**ECOTOXICITY** The product contains monoethanolamin which has following values:  
LC50 (fish, mg/litre): 150 mg/l /96h LC50 (Daphnia, mg/litre / 24 hours): 65 mg/l

**OTHER INFORMATION** The product is alkaline and will cause a local increase in pH when discharged to sea or lake.

## 13. DISPOSAL CONSIDERATIONS

**GENERAL REGULATIONS** Dispose of in compliance with local regulations. Contact supplier for disposal information.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**OTHER INFORMATION** Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

## 15. REGULATORY INFORMATION

**COMPOSITION:** 2-aminoetanol (10%), Secondary alcohol (C12-C14) ethoxylat (5%)

**S-PHRASES** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S-37/39 Wear suitable gloves and eye/face protection.

## 16. OTHER INFORMATION

### INFORMATION SOURCES:

The safety data sheet has been prepared on the basis of information given by raw materials suppliers

**ISSUED:** 10/12/02

Updated 02/08

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN



# SAFETY DATA SHEET

## ABC 581C SALT REMOVER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>TRADE NAME</b>	ABC 581C SALT REMOVER 500-275 (100ml)
<b>Producer/importer</b>	Mega Electronics Limited
<b>Address</b>	Mega House, Grip Industrial Estate, Linton, Cambridge
<b>Country</b>	ENGLAND
<b>Postal code</b>	CB21 4XN
<b>Telephone</b>	+44 (0) 1223 893900
<b>Fax</b>	+44 (0) 1223 893894

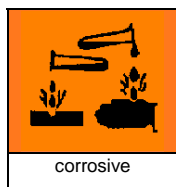
### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	Sodium Hydroxide	215-185-5	1310-73-2	2-5%	C,35
2	Copper sulphate	231-847-6	7758-98-7	<1%	Xn,22-36/38, 50/53

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Highly flammable, N=Dangerous for the environment

### 3. HAZARDS IDENTIFICATION

**GENERAL**  
Causes burns



**ENVIRONMENT**  
Harmful to aquatic organisms,  
may cause long-term adverse  
effects in the aquatic  
environment.

### 4. FIRST AID MEASURES

<b>INHALATION</b>	Remove person to fresh air. Rinse mouth and nose with water. Seek medical advice.
<b>SKIN CONTACT</b>	Remove contaminated clothing immediately. Flush skin immediately with large amounts of water.
<b>EYE CONTACT</b>	Flush with large amounts of water (open eyelids) for at least 15 minutes. Get medical advice.
<b>INGESTION</b>	Give plenty of water or milk to drink. DO NOT INDUCE VOMITING ! seek medical advice immediately

### 5. FIRE-FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	All types
<b>FIRE AND EXPLOSION HAZARDS</b>	Does not burn. May form explosive gases in contact with: Trichloroethylene and methylchloride. In contact with certain metals generate hydrogen. Risk of explosion.

### 6. ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Use the specified protective equipment.
<b>ENVIRONMENTAL PRECAUTIONS</b>	Prevent discharge of significant quantities to drains. Spillage may be pumped up or absorbed with dry, inert material such as sand, earth etc.
<b>METHODS FOR CLEANING UP</b>	Mix the chemicals with an inert material (sand, vermiculite, etc.) and place in a suitable container. Flush with large amounts of water to clean the area.

### 7. HANDLING AND STORAGE

<b>HANDLING PRECAUTIONS</b>	Spillage makes floor and tools slippery.
<b>HANDLING ADVICE:</b>	Use personal protective equipment as specified in Section 8. Eyewash facilities and emergency shower must be available at the workplace.
<b>STORAGE:</b>	Do not store near acids. Containers must be kept tightly closed.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredient name	CAS No.	Interval	Ppm	Mg ./ m <sup>3</sup>	Year	Notes
Sodium Hydroxide	1310-73-2	15 mins	0.0	2.0	2000	

**RESPIRATORY PROTECTION:** Use respiratory protection if gas / vapour is formed.

**EYE PROTECTION** Wear goggles or face shield if there is a possibility of eye contact.

**HAND PROTECTION** Use suitable protective gloves if skin contact is possible.

**PROTECTIVE CLOTHING** Wear apron and boots.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid.		
<b>Colour:</b>	Dark Blue		
<b>Odour:</b>	No characteristic odour.		
<b>Solubility:</b>	Completely miscible with water		
<b>Melting point/range:</b>	Ca - 10 C	<b>Density:</b>	1.1 g /cm <sup>3</sup>
<b>Expl. limit LEL-UEL%:</b>		<b>Solubility in water:</b>	100%
<b>Vapour pressure:</b>		<b>Saturation conc.:</b>	
<b>Decomposition temp.:</b>		<b>Rel. dens. sat. air (air=1):</b>	
<b>pH solution:</b>	>7	<b>Boiling point/range:</b>	Ca 120C
<b>Flash point:</b>		<b>pH concentrate:</b>	Ca 14

## 10. STABILITY AND REACTIVITY

**MATERIALS TO AVOID** Strong basic solution, react with aluminium, lead, tin and zinc with risk for generation of hydrogen gas may form explosive gases in contact with : Trichloroethylene and methylchloride..

## 11. TOXICOLOGICAL INFORMATION

**INHALATION** Respiratory tract irritation, coughing, breathing difficulties.

**SKIN CONTACT** Severe skin burns. Chemical burns.

**EYE CONTACT** May cause severe eye damage and temporary blindness.

**INGESTION** Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage

## 12. ECOLOGICAL INFORMATION

**DEGRADABILITY** Hydrolyze in water to hydrogen, sulphate and copper ion.

**ACCUMALATION** Bioaccumulation: (apply to copper) BCF 17000 plancton (calculated) / 360-9300 fitoplancton.

**ECOTOXICITY** Hydrolyze in water to hydrogen, sulphate and copper ion. Copper ions are toxic to fish, bacteria, algae and protozoans at concentrations below 1mg / litre. Fish (C.auratus): Toxic at 0.01 mg/litre. Mussels: Lethal at 0.55mg / litre/ 12 hours. Oysters: Toxic at 0.1 mg/litre

**OTHER EFFECTS** Discharge to water will increase pH, which may harm fish and aquatic organisms near the discharge point. pH 9 is toxic for fish.

## 13. DISPOSAL CONSIDERATIONS

**GENERAL REGULATIONS** Dispose of in compliance with local regulations. Contact supplier for disposal information.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**UN No: 3266**

**Proper shipping name:** Corrosive liquid, basic inorganic n.o.s.

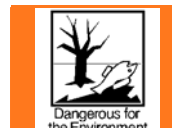
**ADR.RID: Class: 8, 47(c) Packing group: III Not translated: 8 Hazard id: 80**

**IMDG: Class: 8, Packing group: III Sub Risk: EMS: 8-15 Marine Pollutant: MP**

**IATA Class: 8, Packing group: III Sub Risk: Label:**

## 15. REGULATORY INFORMATION

**Classified.:** corrosive



**COMPOSITION**  
Sodium Hydroxide (2-5%)  
Copper sulphate (<1%)

**R-PHRASES** R-34 Causes burns.R-52-53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-PHRASES** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-37/39 Wear suitable gloves and eye/face protection.S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) S61: Avoid release to the environment

## 16. OTHER INFORMATION

**INFORMATION SOURCES:**

The safety data sheet has been prepared on the basis of information given by raw materials suppliers

**ISSUED:** 10/04/02 updated 02/08

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN



# SAFETY DATA SHEET

## ABC 581L SALT REMOVER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>TRADE NAME</b>	ABC 581L SALT REMOVER 500-273 (1L)
<b>Producer/importer</b>	Mega Electronics Limited
<b>Address</b>	Mega House, Grip Industrial Estate, Linton, Cambridge
<b>Country</b>	ENGLAND
<b>Postal code</b>	CB21 4XN
<b>Telephone</b>	+44 (0) 1223 893900
<b>Fax</b>	+44 (0) 1223 893894

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	Potassium Carbonate		584-08-7	50%	Xn,22-37/38

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Highly flammable, N=Dangerous for the environment

### 3. HAZARDS IDENTIFICATION



### 4. FIRST AID MEASURES

<b>GENERAL</b>	Remove contaminated clothing as soon as possible
<b>INHALATION</b>	Remove person to fresh air. Get medical advice if large amounts have been inhaled or the patient experiences discomfort.
<b>SKIN CONTACT</b>	Remove contaminated clothing immediately. Flush skin immediately with large amounts of water.
<b>EYE CONTACT</b>	Flush with large amounts of water (open eyelids) for at least 15 minutes. Get medical advice.
<b>INGESTION</b>	Give plenty of water or milk to drink. If swallowed, seek medical advice immediately and show this container or label.

### 5. FIRE-FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	Water, CO2, foam, dry chemical.
<b>PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS</b>	Use self-contained breathing apparatus if substance is involved in fire.
<b>OTHER INFORMATION</b>	N/A

### 6. ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Use the specified protective equipment.
<b>ENVIRONMENTAL PRECAUTIONS</b>	Prevent discharge of significant quantities to drains.
<b>METHODS FOR CLEANING UP</b>	Flush with large amounts of water to clean the area.

### 7. HANDLING AND STORAGE

<b>HANDLING PRECAUTIONS</b>	Not relevant.
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### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

<b>EYE PROTECTION</b>	Wear goggles or face shield if there is a possibility of eye contact.
<b>HAND PROTECTION</b>	Use suitable protective gloves if skin contact is possible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid.		
Colour:	Colourless.		
Odour:	Alkaline.		
Solubility:	Completely miscible with water		
Melting point/range:	Density:	1.4	
Expl. limit LEL-UEL%:	Solubility in water:		
Vapour pressure:	Saturation conc.:		
Decomposition temp.:	Rel. dens. sat. air (air=1):		
pH solution:	>7	Boiling point/range:	
Flash point:	pH concentrate:		>7

## 10. STABILITY AND REACTIVITY

**STABILITY** Also stable when stored at high temperatures.

**MATERIALS TO AVOID** Reacts violently with acids.

## 11. TOXICOLOGICAL INFORMATION

Acute oral tox.	LD 50 (rats)	1870 mg/kg
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**INHALATION** Inhalation of vapours in high concentration may cause irritation of respiratory system.

**SKIN CONTACT** Drying and cracking of skin.

**EYE CONTACT** Irritating to the eyes.

**INGESTION** Ingestion causes burns to the upper digestive and respiratory tracts. Ingestion may cause abdominal pains and vomiting. Harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

**DEGRADABILITY** not applicable

**OTHER EFFECTS** Bases cause increased pH in the water, this may kill fish.

## 13. DISPOSAL CONSIDERATIONS

**GENERAL REGULATIONS** Dispose of in compliance with local regulations. Contact supplier for disposal information.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**OTHER INFORMATION** Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

## 15. REGULATORY INFORMATION

**Classified.:** Harmful



**R-PHRASES** R-22 Harmful if swallowed. R-36/38 Irritating to eyes and skin.

**S-PHRASES** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-37/39 Wear suitable gloves and eye/face protection. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where)

## 16. OTHER INFORMATION

### INFORMATION SOURCES:

The safety data sheet has been prepared on the basis of information given by raw materials suppliers

**ISSUED:** 10/04/02

Updated 02/08

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# SAFETY DATA SHEET

## ABC 581P SALT REMOVER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

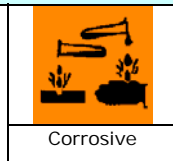
TRADE NAME	ABC 581P SALT REMOVER 500-274 (250ml)
Producer/importer	Mega Electronics Limited
Address	Mega House, Grip Industrial Estate, Linton, Cambridge
Country	ENGLAND
Postal code	CB21 4XN
Telephone	+44 (0) 1223 893900
Fax	+44 (0) 1223 893894

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	Natriumhydroxid	215-185-5	1310-73-2	20-50%	C,35

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Highly flammable, N=Dangerous for the environment

### 3. HAZARDS IDENTIFICATION



Corrosive

**GENERAL** Causes severe burns

### 4. FIRST AID MEASURES

<b>INHALATION</b>	Remove person to fresh air. Rinse mouth and nose with water. Seek medical advice.
<b>SKIN CONTACT</b>	Remove contaminated clothing immediately. Flush skin immediately with large amounts of water.
<b>EYE CONTACT</b>	Flush with large amounts of water (open eyelids) for at least 15 minutes.
<b>INGESTION</b>	Give plenty of water or milk to drink. DO NOT INDUCE VOMITING ! Seek medical advice immediately

### 5. FIRE-FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	All types.
<b>FIRE &amp; EXPLOSION HAZARDS</b>	Does not burn. May form explosive gases in contact with Trichloroethylene and methylchloride In contact with certain metals generate hydrogen. Risk for explosion.

### 6. ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Use protective equipment and keep unauthorized personnel away.
<b>ENVIRONMENTAL PRECAUTIONS</b>	Prevent discharge of significant quantities to drains. Spillage may be pumped up or absorbed with dry, inert material such as sand, earth etc.
<b>METHODS FOR CLEANING UP</b>	Mix the chemicals with an inert material (sand, vermiculite, etc) and place in a suitable container. Flush with large amounts of water to clean the area.

### 7. HANDLING AND STORAGE

<b>HANDLING PRECAUTIONS</b>	Spillage makes floors and tools slippery
<b>HANDLING ADVISE</b>	Use personal protective equipment as specified n section 8. Eyewash facilities and emergency shower must be available at the workplace.
<b>STORAGE</b>	Do not store near acids. Containers must be kept tightly closed.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredient name	Cas nr.	Interval	ppm	mg/m3	Year	Notes
Natriumhydroxid	1310-73-2	15 min.	0,0	2,0	2000	

**RESPIRATORY PROTECTION** Use respiratory protection if gas/vapour is formed.  
**EYE PROTECTION** Wear goggles or face shield if there is a possibility of eye contact.  
**HAND PROTECTION** Use suitable protective gloves if skin contact is possible.  
**PROTECTIVE CLOTHING** Wear apron & boots.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Solution.		
<b>Colour:</b>	Colourless.		
<b>Odour:</b>	No Characteristic odour		
<b>Solubility:</b>	Completely soluble in water.		
<b>Melting point/range:</b>	ca -10 C	<b>Density:</b>	1,3g/cm3
<b>Expl. limit LEL-UEL%:</b>	--	<b>Solubility in water:</b>	100%
<b>Vapour pressure:</b>	--	<b>Saturation conc.:</b>	--
<b>Decomposition temp.:</b>	--	<b>Rel. dens. sat. air (air=1):</b>	--
<b>pH solution:</b>	<7	<b>Boiling point/range:</b>	ca 120 C
<b>Flash point:</b>	--	<b>pH concentrate:</b>	ca 14
<b>Molar weight:</b>	--	<b>Viscosity:</b>	--

## 10. STABILITY AND REACTIVITY

**MATERIALS TO AVOID**  
Strong basic solution, react with aluminium, lead, tin and zinc with risk for generation of hydrogen gas may form explosive gases in contact with: Trichloroethylene and methylchloride

## 11. TOXICOLOGICAL INFORMATION

**INHALATION** Respiratory tract irritation, coughing, breathing difficulties.  
**SKIN CONTACT** Severe skin burns, Chemical burns  
**EYE CONTACT** May cause severe eye damage and temporary blindness.  
**INGESTION** Causes burns if swallowed. Causes burning sensation in the mouth, throat and oesophagus. May cause serious permanent damage.

## 12. ECOLOGICAL INFORMATION

**ACCUMULATION** Does not bio accumulate.  
**ECOTOXICITY** Discharge to water will increase pH, which may harm fish and other aquatic organisms near the discharge point. pH 9 is toxic for fish. LC 50 48h, fish (Lemponis macrochirus) =99 mg/l  
LC50 96h, fish (Gambusia affinis): 125 mg/l

## 13. DISPOSAL CONSIDERATIONS

**GENERAL REGULATIONS** Dispose of in compliance with local regulations. Contact supplier for disposal information.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**UN No.:** 1824 **PROPER SHIPPING NAME** Sodium hydroxide solution

**ADR/RID**

**Class:** 8, 42(b) **Packing group:**

**Not Translated** 8

**Hazard Id:** 80

**IMDG**

**Class:** 8 **Packing group:** II

**Sub Risk:** **EMS:** 8-06

**Marine Pollutant:** n

**IATA**

**Class:** 8 **Packing group:** II

**Sub Risk:**

**Label:**

## 15. REGULATORY INFORMATION

**COMPOSITION:** 2-aminoetanol (10%), Secondary alcohol (C12-C14) ethoxylat (5%)  
**R-PHRASES** R34 Causes Burns.  
**S-PHRASES** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S-37/39 Wear suitable gloves and eye/face protection.

## 16. OTHER INFORMATION

**INFORMATION SOURCES:**  
The safety data sheet has been prepared on the basis of information given by raw materials suppliers  
**ISSUED:** 10/12/02 Updated 02/08

*THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN*





# SAFETY DATA SHEET

## ABC 889A PREDIP / CATALYST

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>TRADE NAME</b>	ABC 889A PREDIP/CATALYST PART A 500-271 (5L) & 500-271-1 (4L)
<b>Producer/importer</b>	Mega Electronics Limited
<b>Address</b>	Mega House, Grip Industrial Estate, Linton, Cambridge
<b>Country</b>	ENGLAND
<b>Postal code</b>	CB21 4XN
<b>Telephone</b>	+44 (0) 1223 893900
<b>Fax</b>	+44 (0) 1223 893894

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	Sodium Chloride	231-598-3	7647-14-5	25%	
2	Hydrochloric acid	231-595-7	7647-01-0	<1%	C,34-37

Legend: T+ =Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+ =Extremely flammable, F=Highly flammable, N=Dangerous for the environment

### 3. HAZARDS IDENTIFICATION

**GENERAL** The product does not require labelling.

### 4. FIRST AID MEASURES

**GENERAL** Remove contaminated clothing as soon as possible

**INHALATION** Remove person to fresh air. Get medical advise if large amounts have been inhaled or the patient experiences discomfort.

**SKIN CONTACT** Remove contaminated clothing immediately. Flush skin immediately with large amounts of water.

**EYE CONTACT** Flush with large amounts of water (open eyelids) for at least 15 minutes. Get medical advice.

**INGESTION** Give plenty of water or milk to drink. If swallowed, seek medical advice immediately and show this container or label.

### 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA** Water, CO2, foam, dry chemical.

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS** Use self-contained breathing apparatus if substance is involved in fire.

**OTHER INFORMATION** Prevent release of fire control water to surface water or ground water.

### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS** Use the specified protective equipment.

**ENVIRONMENTAL PRECAUTIONS** Prevent discharge of significant quantities to drains.

**METHODS FOR CLEANING UP** Flush with large amounts of water to clean the area.

### 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS** Not relevant.

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**EYE PROTECTION** Wear goggles or face shield if there is a possibility of eye contact.

**HAND PROTECTION** Use suitable protective gloves if skin contact is possible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid.		
Colour:	Colourless.		
Odour:	Aromatic.		
Solubility:	Completely miscible with water		
Melting point/range:	Density:	1.18	
Expl. limit LEL-UEL%:	Solubility in water:		
Vapour pressure:	Saturation conc.:		
Decomposition temp.:	Rel. dens. sat. air (air=1):		
pH solution:	3-7	Boiling point/range:	
Flash point:		pH concentrate:	3

## 10. STABILITY AND REACTIVITY

<b>STABILITY</b>	Also stable when stored at high temperatures.
<b>MATERIALS TO AVOID</b>	Strong oxidizing agent. Strong acids.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Hydrogen chloride gas. Sodium oxides

## 11. TOXICOLOGICAL INFORMATION

<b>INHALATION</b>	Inhalation of vapours in high concentration may cause irritation of respiratory system.
<b>SKIN CONTACT</b>	May cause skin irritation in susceptible persons
<b>EYE CONTACT</b>	Irritating to the eyes.
<b>INGESTION</b>	May cause nausea, vomiting.

## 12. ECOLOGICAL INFORMATION

<b>DEGRADABILITY</b>	not applicable
<b>ECOTOXICITY</b>	Not known negative effects on the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**GENERAL REGULATIONS** Dispose of in compliance with local regulations. Contact supplier for disposal information.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**OTHER INFORMATION** Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

## 15. REGULATORY INFORMATION

**COMPOSITION** : Sodium Chloride (25%)

**S-PHRASES** **S-26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**S-37/39** Wear suitable gloves and eye/face protection.  
**S-45** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

## 16. OTHER INFORMATION

### INFORMATION SOURCES:

The safety data sheet has been prepared on the basis of information given by raw materials suppliers

**ISSUED:** 04/10/02

Updated 02/08

**THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN**



# SAFETY DATA SHEET

## ABC 889A PREDIP / CATALYST

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

**TRADE NAME** ABC 889B CATALYST PART B 500-272 (200ml) & 500-272-1 (100ml)

**Producer/importer** Mega Electronics Limited

**Address** Mega House, Grip Industrial Estate,  
Linton, Cambridge

**Country** ENGLAND

**Postal code** CB21 4XN

**Telephone** +44 (0) 1223 893900

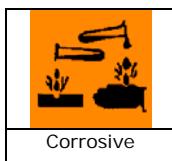
**Fax** +44 (0) 1223 893894

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	Tin Chloride		10025-69-1	50%	C,22-34
2	Hydrochloric acid	231-595-7	7647-01-0	10%	C,34-37
3	Palladium Chloride		7647-10-1	<1%	C,34

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Highly flammable, N=Dangerous for the environment

### 3. HAZARDS IDENTIFICATION



#### GENERAL

Causes severe burns. Irritating to respiratory system

### 4. FIRST AID MEASURES

<b>INHALATION</b>	Fresh air. Rinse mouth and nose with water. Seek medical advice
<b>SKIN CONTACT</b>	Remove contaminated clothing immediately. Flush skin immediately with large amounts of water. Chemical burns must be treated by a doctor.
<b>EYE CONTACT</b>	Flush with large amounts of water (open eyelids) for at least 15 minutes. Get medical advice.
<b>INGESTION</b>	Drink a couple of glasses of water or milk. DO NOT INDUCE VOMITING! Get medical advice immediately

### 5. FIRE-FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	Use extinguishing media appropriate for surrounding fire.
<b>FIRE AND EXPLOSION HAZARDS:</b>	Contact with certain metals and water/moist air causes formation of hydrogen gas, which may form explosive mixtures with air.
<b>OTHER INFORMATION</b>	Containers close to fire should be removed immediately or cooled with water.

### 6. ACCIDENTAL RELEASE MEASURES

<b>PERSONAL PRECAUTIONS</b>	Use protective equipment and keep unauthorized personnel away
<b>ENVIRONMENTAL PRECAUTIONS</b>	Do not allow spill to enter sewers or watercourses. Contain spills with sand, earth etc. and collect in appropriate containers according to national regulations. DO NOT USE SAWDUST.

### 7. HANDLING AND STORAGE

<b>HANDLING PRECAUTIONS</b>	Change clothing when finished handling the product. Shower in connection with workplace. Mechanical ventilation or local exhaust ventilation may be required.
<b>STORAGE</b>	Store in a cool dry place

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

<b>RESPIRATORY PROTECTION</b>	Full-face mask respirator with cartridge B (grey, inorganic gases/vapours). may be necessary
<b>EYE PROTECTION</b>	Wear eye protection if there is a possibility of direct contact or splashes
<b>HAND PROTECTION</b>	Always use gloves.
<b>PROTECTIVE CLOTHING</b>	Wear apron and boots

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Aqueous solution.		
<b>Colour:</b>	Dark brown.		
<b>Odour:</b>			
<b>Solubility:</b>	Miscible with water.		
<b>Melting point/range:</b>	<b>Density:</b>	1.44	
<b>Expl. Limit LEL-UEL%:</b>	<b>Solubility in water:</b>	100%	
<b>Vapour pressure:</b>	<b>Saturation conc.:</b>		
<b>Decomposition temp.:</b>	<b>Rel. dens. Sat. air (air=1):</b>		
<b>Ph solution:</b>	<1	<b>Boiling point/range:</b>	
<b>Flash point:</b>		<b>Ph concentrate:</b>	<1

## 10. STABILITY AND REACTIVITY

**STABILITY** Attacks metals, wood and textile.

## 11. TOXICOLOGICAL INFORMATION

<b>INHALATION</b>	Inhalation may cause: Smarting in nose, throat and mouth.
<b>SKIN CONTACT</b>	May cause serious burns to the skin.
<b>EYE CONTACT</b>	May cause serious damage
<b>INGESTION</b>	May cause chemical burns to mouth and throat.

## 12. ECOLOGICAL INFORMATION

<b>DEGRADABILITY</b>	Not applicable
<b>OTHER EFFECTS</b>	Product discharge to water will cause more acidic water, which may harm fish and other organisms near the discharge site.
<b>OTHER INFORMATION</b>	Ecotoxicological data are not known for this product. Do not discharge product to sewer or drains

## 13. DISPOSAL CONSIDERATIONS

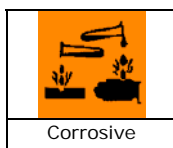
**GENERAL REGULATIONS** Treat as hazardous waste. If spill or waste can not be treated by your own, it must be disposed of an approved waste treatment facility

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**UN No.:** 3264

**Classified.:**



**PROPER SHIPPING NAME:** Corrosive liquid, n.o.s.

**ADR/RID**

**Class:** 8,17©  
**Not Translated** 8

**Packing group:** III

**Hazard Id:** 80

**IMDG**

**Class:** 8  
**Sub Risk:**

**Packing group:** III  
**EMS:** 8-15

**Marine Pollutant:** Nej

**IATA**

**Class:** 8  
**Sub Risk:**

**Packing group:** III

**OTHER INFORMATION** Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

**COMPOSITION:** Tin Chloride (50%), Hydrochloric acid (10%), Palladium Chloride (<1%)

**R-PHRASES** R-22 Harmful if swallowed. R-34 – Causes burns

**S-PHRASES** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

## 16. OTHER INFORMATION: N/A

**ISSUED:** 25/09/02

Updated 02/08



# SAFETY DATA SHEET

## ABC 972 BRIGHTENER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

<b>TRADE NAME</b>	ABC 972 BRIGHTENER 500-146-1 (500ml)
<b>Producer/importer</b>	Mega Electronics Limited
<b>Address</b>	Mega House, Grip Industrial Estate, Linton, Cambridge
<b>Country</b>	ENGLAND
<b>Postal code</b>	CB21 4XN
<b>Telephone</b>	+44 (0) 1223 893900
<b>Fax</b>	+44 (0) 1223 893894

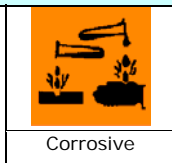
### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	SULPHURIC ACID	231-639-5	7664-93-9	1- 5%	C, R35
2	COPPER SULPHATE PENTAHYDRATE	231-847-6	7758-99-8	<1	Xn: R22 Xi: R36/38 N: R50/53

Legend: T+ =Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+ =Extremely flammable, F=Highly flammable, N=Dangerous for the environment

**COMPOSITION COMMENTS:** Contains surface active agents.

### 3. HAZARDS IDENTIFICATION



Corrosive



Dangerous for the Environment

#### ENVIRONMENT

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

**GENERAL** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST AID MEASURES

**GENERAL INFORMATION** Remove affected person from source of contamination. Get medical attention if any discomfort continues.

**INHALATION** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues

**SKIN CONTACT** Remove affected person from source of contamination. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.

**EYE CONTACT** Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**INGESTION** Rinse mouth thoroughly Drink plenty of water. Get medical attention if any discomfort continues.

### 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA** Use fire-extinguishing media appropriate for surrounding materials.

### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS** Wear protective clothing as described in Section 8 of this safety data sheet.

**ENVIRONMENTAL PRECAUTIONS** Do not discharge into drains, water courses or onto the ground.

**METHODS FOR CLEANING UP** DO NOT touch spilled material. Wear necessary protective equipment.

Provide ventilation and confine spill. Do not allow run-off into sewer. Absorb with inert damp, non-combustible material, then flush area with water. Inform Authorities if large amounts are involved.

### 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS** Avoid spilling, skin and eye contact.

**STORAGE PRECAUTIONS** Store in tightly closed original container in a dry, cool and well-ventilated place.  
Store in closed original container at temperatures between 5°C and 30°C

**STORAGE** Chemical Storage.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredient name						
COPPER SULPHATE PENTAHYDRATE	Std	LT- ppm	LT – mg/m3 1(Cu) mg/m3	ST –ppm	ST – mg/m3 2(Cu) mg/m3	
SULPHURIC ACID	OES		1 mg/m3			

PROTECTIVE EQUIPMENT



### ENGINEERING MEASURES

No particular ventilation requirements.

### HAND PROTECTION

Use suitable protective gloves if risk of skin contact.

### EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

### OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

### HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA!

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Clear Liquid.		
Colour:	Blue.		
Odour:	--		
Solubility:	soluble in water.		
Melting point/range:	--	Relative Density:	1.02 @ 20°C
Expl. limit LEL-UEL%:	--	Solubility in water:	--
Vapour pressure:	--	Saturation conc.:	--
Decomposition temp.:	--	Rel. dens. sat. air (air=1):	--
pH solution:	--	Boiling point/range:	--
Flash point:	--	pH Value:	1
Molar weight:	--	Viscosity:	--

## 10. STABILITY AND REACTIVITY

Stable under normal temperature conditions.

## 11. TOXICOLOGICAL INFORMATION

**HEALTH WARNINGS** No specific health warnings noted.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICITY** This product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS** Dispose of waste and residues in accordance with local authority requirements.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**GENERAL** This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

**MARINE POLLUTANT** No

## 15. REGULATORY INFORMATION

**R-PHRASES** R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-PHRASES** S60 This material and its container must be disposed of as hazardous waste. UK REGULATORY

**REFERENCES** Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations.

**STATUTORY INSTRUMENTS** Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

**GUIDANCE NOTES** Workplace Exposure Limits EH40.

## 16. OTHER INFORMATION

### INFORMATION SOURCES:

Dangerous Properties of Industrial Chemicals, N.Sax, Croner's: Dangerous Substances. Croner's: Emergency Spillage Guide. Croner's: Substances Hazardous to Health. Material Safety Data Sheet, Misc. manufacturers.

REV. NO./REPL. SDS GENERATED 2

### RISK PHRASES IN FULL

**R22** Harmful if swallowed.

**R35** Causes severe burns.

**R36/38** Irritating to eyes and skin.

**R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**REVISION DATE:** 03/07/2007

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN



# SAFETY DATA SHEET

## ABC 972 LEVELLER

### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

**TRADE NAME** ABC 972 LEVELLER 500-147-1 (1 Litre)

**Producer/importer** Mega Electronics Limited  
**Address** Mega House, Grip Industrial Estate,  
Linton, Cambridge  
**Country** ENGLAND  
**Postal code** CB21 4XN  
**Telephone** +44 (0) 1223 893900  
**Fax** +44 (0) 1223 893894

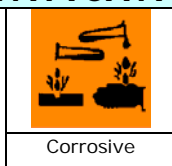
### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No	Ingredient name	EC No.	CAS No.	Conc. (wt%)	Classification
1	SULPHURIC ACID	231-639-5	7664-93-9	1- 5%	C,R35
2	COPPER SULPHATE PENTAHYDRATE	231-847-6	7758-99-8	<1	Xn: R22 Xi: R36/38 N: R50/53

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Highly flammable, N=Dangerous for the environment

**COMPOSITION COMMENTS:** Contains surface active agents.

### 3. HAZARDS IDENTIFICATION



Corrosive



Dangerous for the Environment

#### ENVIRONMENT

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

**GENERAL** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST AID MEASURES

**GENERAL INFORMATION** Remove affected person from source of contamination. Get medical attention if any discomfort continues.

**INHALATION** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues

**SKIN CONTACT** Remove affected person from source of contamination. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.

**EYE CONTACT** Remove victim immediately from source of exposure. Make sure to remove any contact lenses from

the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**INGESTION** Rinse mouth thoroughly Drink plenty of water. Get medical attention if any discomfort continues.

### 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA** Use fire-extinguishing media appropriate for surrounding materials.

### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS** Wear protective clothing as described in Section 8 of this safety data sheet.

**ENVIRONMENTAL PRECAUTIONS** Do not discharge into drains, water courses or onto the ground.

**METHODS FOR CLEANING UP** DO NOT touch spilled material. Wear necessary protective equipment. Provide ventilation and confine spill. Do not allow run-off into sewer. Absorb with inert damp, non-combustible material, then flush area with water. Inform Authorities if large amounts are involved.

### 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS** Avoid spilling, skin and eye contact.

**STORAGE PRECAUTIONS** Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 5°C and 30°C

**STORAGE** Chemical Storage.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredient name						
COPPER SULPHATE PENTAHYDRATE	Std	LT- ppm	LT – mg/m3 1(Cu) mg/m3	ST –ppm	ST – mg/m3 2(Cu) mg/m3	
SULPHURIC ACID	OES		1 mg/m3			

### PROTECTIVE EQUIPMENT



#### ENGINEERING MEASURES

No particular ventilation requirements.

#### HAND PROTECTION

Use suitable protective gloves if risk of skin contact.

#### EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

#### OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

#### HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA!

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Clear Liquid.		
Colour:	Blue.		
Odour:	--		
Solubility:	soluble in water.		
Melting point/range:	--	Relative Density:	1.02 @ 20°C
Expl. limit LEL-UEL%:	--	Solubility in water:	--
Vapour pressure:	--	Saturation conc.:	--
Decomposition temp.:	--	Rel. dens. sat. air (air=1):	--
pH solution:	--	Boiling point/range:	--
Flash point:	--	pH Value:	1
Molar weight:	--	Viscosity:	--

## 10. STABILITY AND REACTIVITY

Stable under normal temperature conditions.

## 11. TOXICOLOGICAL INFORMATION

**HEALTH WARNINGS** No specific health warnings noted.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICITY** This product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS** Dispose of waste and residues in accordance with local authority requirements.

## 14. TRANSPORT INFORMATION

**Classified as Dangerous Goods:**  Yes  No  N/A

**GENERAL** This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

**MARINE POLLUTANT** No

## 15. REGULATORY INFORMATION

**R-PHRASES** R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-PHRASES** S60 This material and its container must be disposed of as hazardous waste.UK REGULATORY

**REFERENCES** Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations.

#### STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

**GUIDANCE NOTES** Workplace Exposure Limits EH40.

## 16. OTHER INFORMATION

#### INFORMATION SOURCES:

Dangerous Properties of Industrial Chemicals, N.Sax, Croner's: Dangerous Substances. Croner's: Emergency Spillage Guide. Croner's: Substances Hazardous to Health. Material Safety Data Sheet, Misc. manufacturers.

REV. NO./REPL. SDS GENERATED 2

#### RISK PHRASES IN FULL

**R22** Harmful if swallowed.

**R35** Causes severe burns.

**R36/38** Irritating to eyes and skin.

**R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**REVISION DATE:** 03/07/2007

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN



**SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE**

**NAME:** ABC COPPER PLATING SOLUTION 9712  
**PART NO:** 500-147-2 - 25 litres

**MANUFACTURER'S/SUPPLIERS NAME, REGISTERED ADDRESS AND EMERGENCY TEL NO:**

MEGA ELECTRONICS LTD., TELEPHONE: +0044 01223 893900  
 THE GRIP INDUSTRIAL ESTATE,  
 LINTON, CAMBRIDGE. ENGLAND, CB21 4XN.

**ORGANISATIONS NAME & ADDRESS AT WHICH MANUFACTURED**

PMD (UK) Limited  
 Broad Lane, Coventry, CV5 7AY Tel: 024 764 66691

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

	% by WT	Hazard	R,PHRASE NO.
SULPHURIC ACID	231-639-5 15 %	C	35
COPPER SULPHATE	231-847-6 7%	Xn	22,
PENTAHYDRATE		Xi	36/38
		N	50/53

**3. HAZARDS IDENTIFICATION:**

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

**4. FIRST AID MEASURES:**

**GENERAL:** Remove affected person from source of contamination. Get medical attention

**INHALATION:** Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air

**INGESTION:** DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Drink plenty of water. Get medical attention immediately! Provide rest, warmth and fresh air

**SKIN:** Remove affected person from source of contamination. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention promptly if symptoms occur after washing

**EYE:** Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

**5. FIRE FIGHTING MEASURES:**

**EXTINGUISHING MEDIA:**

Use extinguishing media appropriate for surrounding fire.

**UNUSUAL FIRE & EXPLOSION HAZARDS:**

May develop highly toxic or corrosive fumes if heated.

**6. ACCIDENTAL RELEASE MEASURES:**

**PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety sheet.

**SPILL CLEANUP METHODS:**

DO NOT touch spilled material. Wear necessary protective equipment. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb with inert, damp, non-combustible material, then flush area with water. Inform Authorities if large amounts are involved

**7. HANDLING AND STORAGE:**

**USAGE PRECAUTIONS:** Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Eye wash facilities and emergency shower must be available when handling this product

**STORAGE PRECAUTIONS:** Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 5°C and 30°C

**STORAGE CRITERIA:** Chemical storage.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:**

**COPPER SULPHATE PENTAHYDRATE**

Std	Lt-ppm	LT – mg/M3	ST – ppm	ST – mg/m3
		1 (Cu) mg /m3		2 (Cu) mg / m3

**PROTECTIVE EQUIPMENT:**

GLOVES, SPECTACLES, FULL FACE SHIELD

**PROCESS CONDITIONS:** Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station

**RESPIRATORY EQUIPMENT:** Respiratory protection must be used if air concentration exceeds acceptable level

**HAND PROTECTION:** Use protective gloves.

**EYE PROTECTION:** Use approved safety goggles or face shield.

**OTHER PROTECTION:** Wear appropriate clothing to prevent any possibility of skin contact

**HYGIENIC MEASURES:** DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. No eating or drinking while working with this material

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**APPEARANCE:** Clear. Liquid **COLOUR:** Blue.

**SOLUBILITY DESCRIPTION:** Soluble in water.

**pH-VALUE, CONC. SOLUTION:** <1

**10. STABILITY AND REACTIVITY:**

**STABILITY:** Stable under normal temperature conditions.

**CONDITIONS TO AVOID:** Avoid contact with: Strong alkalis.

**HAZARDOUS DECOMP. PRODUCTS:**

Toxic gases/vapours/fumes of: Sulphurous gases (SOx).

**11. TOXICOLOGICAL INFORMATION:**

**INHALATION:** May cause irritation to the respiratory system

**INGESTION:** May cause chemical burns to mouth and throat

**SKIN CONTACT:** Causes burns.

**EYE CONTACT:** Causes burns. Risk of serious damage to eyes.

**HEALTH WARNINGS:** Swallowing concentrated chemical may cause severe internal injury.

**RESPIRATORY SYSTEM.** Serious damage to the lining of nose, throat and lungs

**12. ECOLOGICAL INFORMATION:**

**ECOTOXICITY:** This product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

**MOBILITY:** The product is soluble in water.

**ACUTE FISH TOXICITY:** Concentrations which give low pH maybe fatal to fish and aquatic organisms.

Name: SULPHURIC ACID

Mobility: This product is soluble in water.

Bioaccumulation potential. Will not bio-accumulate

Name: COPPER SULPHATE PENTAHYDRATE

Ecotoxicity: The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

LC 50, 96 Hrs, Fish mg/l 0.39

Mobility: This product is soluble in water.

Acute Fish Toxicity: Very toxic to aquatic organisms.

**13. DISPOSAL CONSIDERATIONS:**

**DISPOSAL METHODS:** Dispose of waste and residues in accordance with local authority requirements.

**14. TRANSPORT INFORMATION:**

LABEL FOR CONVEYANCE:

CORROSIVE SUBSTANCE (CLASS 8) (BLACK/WHITE HALVED DIAMONDS WITH CORROSIVE SYMBOL

UK ROAD CLASS: 8

PROPER SHIPPING NAME:

CORROSIVE LIQUID, ACIDIC INORGANIC NSO (SULPHURIC ACID)

UN No. ROAD: 3264 UN ROAD PACK GR: II

ADR CLASS: 8 HAZARD NO (ADR) 80

ADR CLASS No.: Class 8: Corrosive substances.

ADR PACK GROUP: II RID CLASS NO 8

ADR LABEL No.: 8 UN NO SEA 3264

CEVIC TEC(R) No.: 80GC1-II+III

RID PACK GROUP: II

IMDG CLASS: 8 IMDG PAGE No.: 8147

IMDG PACK GR.: II EmS No.: F – A, S – B

MFAG: see guide MARINE POLLUTANT: No

UN No AIR: 3264 AIR CLASS: 8

AIR PACK GR.: II

**15. REGULATORY INFORMATION:**

LABEL FOR SUPPLY: CORROSIVE

DANGEROUS FOR THE ENVIRONMENT

**RISK PHRASES:** R-35 Causes severe burns.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**SAFETY PHRASES:**

S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S-24/25 Avoid contact with skin and eyes.

S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S-57 Use appropriate containment to avoid environmental contamination.

S-60 This material and its container must be disposed of as hazardous waste.

S-61 Avoid release to the environment.

**UK REGULATORY REFERENCES:**

Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 1988

**GUIDANCE NOTES:**

Occupational Exposure Limits EH40.

**16. OTHER INFORMATION:**

INFORMATION SOURCES:

Dangerous Properties of Industrial Chemicals, N.Sax, Croner's: Dangerous Substances. Croner's: Emergency Spillage Guide. Croner's: Substances Hazardous to Health. Material Safety Data Sheet, Misc. manufacturers

REVISION DATE: 08/10/07