



CASWELL INC

Safety Data Sheet Plug N Plate Tin

SECTION 1: Identification

1.1 Product identifier

Product name	Plug N Plate Tin
Product number	TINCON
Brand	Caswell

1.2 Other means of identification

Plug N Plate Tin Solution

1.3 Recommended use of the chemical and restrictions on use

Electroplating Bath

1.4 Supplier's details

Name	Caswell Inc
Address	7696 Route 31 Lyons NY 14489 USA
Telephone	315 946 1213
Fax	315 946 4456
email	sales@caswellplating.com

1.5 Emergency phone number(s)

Office Hours (9-4ET): 315 946 1213
24 Hour: CHEMTEL US# 1-800-255-3924 Intl# +01-813-248-0585

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Skin corrosion/irritation (chapter 3.2), Cat. 1B
- Germ cell mutagenicity (chapter 3.5), Cat. 2
- Corrosive to metals (chapter 2.16), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Sensitization, skin (chapter 3.4), Cat. 1A
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1
- Acute toxicity, inhalation (chapter 3.1), Cat. 4

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- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H341	Suspected of causing genetic defects
H317	May cause an allergic skin reaction
H290	May be corrosive to metals
H319	Causes serious eye irritation
H410	Very toxic to aquatic life with long lasting effects
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor/...
P321	Specific treatment (see ... on this label).
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container to ...
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P234	Keep only in original container.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosive resistant/... container with a resistant inner liner.
P337+P313	If eye irritation persists: Get medical advice/attention.
P273	Avoid release to the environment.
P391	Collect spillage.
P271	Use only outdoors or in a well-ventilated area.

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P312
P403+P233
P314

Call a POISON CENTER/doctor/... if you feel unwell.
Store in a well ventilated place. Keep container tightly closed.
Get medical advice/attention if you feel unwell.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. Tin (II) Sulfate

Concentration 19 %
CAS no. 7488-55-3

2. Sulfuric acid (<10%)

Concentration 2 %
EC no. 231-639-5
CAS no. 7664-93-9
Index no. 016-020-00-8

3. WATER OR OTHER NON-REPORTABLE INGREDIENTS

Concentration 79 %
CAS no. 7732-18-5

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.
Personal protective equipment for first-aid responders	See section 8

4.2 Most important symptoms/effects, acute and delayed

Material is destructive to mucous membranes and upper respiratory tract, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

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5.2 Specific hazards arising from the chemical

None Known

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear PPE per section 8.

6.2 Environmental precautions

Avoid release into the environment.

6.3 Methods and materials for containment and cleaning up

SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from oxidizers.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Tin (II) Sulfate (CAS: 7488-55-3)

PEL-TWA: 2mg/m³ (OSHA)

2. Sulfuric acid (<10%) (CAS: 7664-93-9 EC: 231-639-5)

PEL-TWA: 1mg/m³ (OSHA)

8.2 Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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Skin protection

Wear chemical resistant gloves and clothing.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	White liquid
Odor	None
Odor threshold	na
pH	1
Melting point/freezing point	na
Initial boiling point and boiling range	na
Flash point	na
Evaporation rate	na
Flammability (solid, gas)	na
Upper/lower flammability limits	na
Vapor pressure	na
Vapor density	na
Relative density	1.3
Solubility(ies)	Fully miscible in water
Partition coefficient: n-octanol/water	na
Auto-ignition temperature	na
Decomposition temperature	na
Viscosity	na
Explosive properties	na
Oxidizing properties	na

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactive

10.2 Chemical stability

Stable

10.5 Incompatible materials

Strong Oxidizers

10.6 Hazardous decomposition products

Sulfur oxides, Tin/Tin Oxides

SECTION 11: Toxicological information

Information on toxicological effects

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Acute toxicity

Harmful if swallowed, inhaled or absorbed through skin. Material is destructive to mucous membranes and upper respiratory tract, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

LD50 Oral Rat - 2207 mh/kg (Tin Sulfate)

LC50 Inhalation Rat 4 hour > 2mg/l

Skin corrosion/irritation

Can cause burns and irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May be absorbed through skin in harmful amounts.

Germ cell mutagenicity

Suspected of causing genetic problems.

Carcinogenicity

Not a carcinogen

STOT-single exposure

Respiratory System

STOT-repeated exposure

Cardi Vascular System

SECTION 12: Ecological information

Toxicity

Harmful to the environment.

LC50 - Daphnia Magna 99.5 mg/l - 48 hour (Tin Sulfate)

SECTION 13: Disposal considerations

Disposal of the product

Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

Disposal of contaminated packaging

Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

SECTION 14: Transport information

DOT (US)

UN Number: UN3264

Class: 8

Packing Group: II

Proper Shipping Name: Corrosive liquid, acidic, n.o.s. (Sulfuric Acid)

Reportable quantity (RQ):

Marine pollutant:

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Poison inhalation hazard:
Quantities under 1 L may be shipped as LTD QTY

IMDG

UN Number: UN3264
Class: 8
Packing Group: II
EMS Number:
Proper Shipping Name: Corrosive liquid, acidic, n.o.s. (Sulfuric Acid)

IATA

UN Number: UN3264
Class: 8
Packing Group: II
Proper Shipping Name: Corrosive liquid, acidic, n.o.s. (Sulfuric Acid)

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Sulfuric acid
CAS number: 7664-93-9

New Jersey Right To Know Components

Common name: SULFURIC ACID
CAS number: 7664-93-9

Pennsylvania Right To Know Components

Chemical name: Sulfuric acid
CAS number: 7664-93-9

California Prop. 65 components

Chemical name: Sulfuric acid (<10%)
CAS number: 7664-93-9
03/14/2003 - Cancer

HMIS Rating

Plug N Plate Tin	
HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

NFPA Rating



SECTION 16: Other information

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16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Caswell Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Caswell Inc has been advised of the possibility of such damages.