

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: Conductive carbon/graphite paint, SEM adhesive.
Catalogue Number: I003.
Other Names: Electrodag 15, Graphite Conductive Adhesive 154, Paint related material.
Recommended Use: Used as an adhesive to mount SEM samples.

Supplier Name: ProSciTech
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification:
 Hazardous according to criteria of Hazardous Substances Information System [HSIS Worksafe Australia].

Hazardous and/or Dangerous Nature:
 HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk Phrases:
 R10 Flammable.
 R11 Highly flammable.
 R22 Harmful if swallowed.
 R36 Irritating to eyes.
 R37/38 Irritating to respiratory system and skin.
 R41 Risk of serious eye damage.
 R67 Vapours may cause drowsiness and dizziness.

Safety Phrases:
 S2 Keep out of reach of children.
 S7/9 Keep container tightly closed and in a well-ventilated place.
 S16 Keep away from sources of ignition - No smoking.
 S24/25 Avoid contact with skin and eyes.
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S37/39 Wear suitable gloves and eye/face protection.
 S46 If swallowed, seek medical advice immediately and show this container or label.

Refer to Section 15 for Poisons Schedule.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Pure Substance (Proportion 100%):

Chemical Identity: Conductive carbon/graphite paint, SEM adhesive.
Common Name(s): Electrodag 15, Graphite Conductive Adhesive 154, Paint related material.
CAS Number(s): Mixture – see below.

Mixture Substance:

<i>Ingredients</i>	<i>Cas Number(s)</i>	<i>Proportion (%)</i>
Isopropyl alcohol	67-63-0	66
Graphite	7782-42-5	15
n-Butyl alcohol	71-36-3	5
Hexylene glycol	107-41-5	5
Propylene glycol monomethyl ether	107-98-2	5

SECTION 4 - FIRST AID MEASURES

Ingestion: Keep individual calm and seek medical attention.
Inhalation: If affected, remove individual to fresh air; if breathing is difficult, administer oxygen; if breathing has stopped, give artificial respiration and seek medical attention immediately.
Eye Contact: Flush eyes with water, lifting upper and lower lids occasionally, and seek medical attention immediately.
Skin Contact: Wash with soap and water; remove contaminated clothing and launder before reuse. If irritation occurs/persists seek medical attention.
First Aid Facilities: Eyebath/eyewash.
Medical Attention & Special Treatment:

Not available.

Additional Information:

Not available.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Foam, carbon dioxide, dry chemical.

Hazards from Combustion Products:

Carbon monoxide, Carbon dioxide.

Precautions for Fire Fighters:

Self-contained breathing supply also wear appropriate protective equipment for surrounding fire.

Hazchem Code: 2SE

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Not available.

Containment & Clean up:

Remove all sources of ignition and ventilate area; apply absorbent material and transfer to containers.

SECTION 7 - HANDLING & STORAGE

Precautions for Safe Handling:

Avoid prolonged inhalation of mists or vapours. Wear protective clothing when handling. Wash thoroughly after handling.

Precautions for Safe Storage:

Store in a cool, dry place away from heat and sources of ignition. Store with lid tightly sealed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards:

Isopropyl alcohol, Cas 67-63-0:
TWA 400ppm; TWA 983mg/m³
STEL 500ppm; STEL 1230mg/m³

Graphite, Cas 7782-42-5:
TWA 3mg/m³

n-Butyl alcohol, Cas 71-36-3:
TWA 50ppm; TWA 152mg/m³ – PEAK Limitation

Hexylene glycol, Cas 107-41-5:
TWA 25ppm; TWA 121mg/m³ – PEAK Limitation

Propylene glycol monomethyl ether, Cas 107-98-2:
TWA 100ppm; TWA 369mg/m³
STEL 150ppm; STEL 553mg/m³

Biological Limit Values:

No biological limit allocated.

Engineering Controls:

Provide sufficient mechanical ventilation to maintain exposure below the National Exposure Standards.

Personal Protective Equipment:

EYE: Wear chemical splash goggles.

GLOVE: Wear solvent resistant gloves.

RESPIRATOR: If the TLV of the product is exceeded, a mechanical or self-contained breathing apparatus is advised.

OTHER: No special equipment deemed necessary under normal usage.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:

Thixotropic Black Fluid.

Odour:

Sharp odour.

pH:

Not available.

Vapour pressure (mm of Hg at °C):

31.00

Vapour density:

Not available.

Boiling point/range (°C):	Not available.
Freezing/melting point (°C):	Not available.
Solubility:	Partially soluble in water.
Specific gravity or density:	.89
Flash Point:	12°C (tagged closed cup).
Flammable (explosive) limits:	Not available.
Ignition temperature:	Not available.
Additional Information:	
Volatile:	80.0

SECTION 10 - STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Keep away from sparks, open flames or other sources of ignition and incompatible materials.
Incompatible Materials:	Strong Oxidizers.
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide.
Hazardous Reactions:	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Exposure and Health Effects:	As below.
Ingestion:	Can cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Inhalation:	Excessive inhalation of vapours or mists can cause nasal and respiratory irritation, dizziness, nausea, and headache.
Eye Contact:	May cause severe irritation, burning sensation, blurred vision.
Skin Contact:	Repeated or prolonged contact can cause irritation and dermatitis.
Human/Animal data:	Not available.
Carcinogenic Category:	Group 3: Not classifiable as to its carcinogenicity to humans.
Other Carcinogenic Information:	Not available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:	Not available.
Persistence and degradability:	Not available.
Mobility:	Not available.
Additional Information:	Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Methods:	Consult with Federal, State and local waste regulations.
Special Precautions/Additional Information:	Not available.

SECTION 14 - TRANSPORT INFORMATION

UN Number:	UN1263
UN Proper Shipping Name:	Paint
Class and Subsidiary risk:	3
Packing Group:	PG III
Special Precautions for User:	Not available.
Hazchem Code:	2SE

SECTION 15 - REGULATORY INFORMATION

Poison Schedule Number:	None Allocated.
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SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: October 10

Comments:

List of Publications referenced when creating this MSDS;

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

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