



SUMITOMO BAKELITE CO.,LTD.

SAFETY DATA SHEET

Section 1: Identification of the chemical and of the supplier

Chemical description Die Attach Paste
Product identifier **SUMIRESIN EXCEL® CRM-1290WA**

Other means of identification
SDS number P003232

Details of principal suppliers

SUMITOMO BAKELITE CO.,LTD.
Tennoz Park Side Bldg.
5-8, Higashi-Shinagawa 2-Chome
Shinagawa-ku, Tokyo 140-0002, Japan
Phone: +81-3-5462-4038 e-mail: ukqa@sumibe.co.jp

EMERGENCY CONTACTS:

SUMITOMO PLASTICS AMERICA, INC. Phone: +1-408-243-8402 (U.S.A.)
CHEMTREC (24hours everyday) Phone: +1-800-424-9300 (U.S.A.)
SUMITOMO BAKELITE SINGAPORE PTE.LTD. Phone: +65-6752-6431 (Singapore)
N.V. SUMITOMO BAKELITE EUROPE S.A. Phone: +32-9295-0167 (Belgium)
SUMITOMO BAKELITE (SUZHOU) CO.,LTD. Phone: +86-512-67613850 (China)
SUMITOMO BAKELITE (TAIWAN) CO.,LTD. Phone: +886-7-787-1285 (Taiwan)
SUMITOMO BAKELITE (SINGAPORE) CO., LTD. MALAYSIA Branch Office.
(Address:501A Level 5 Tower A, Damansara Uptown 5, 5 Jalan SS 21/39, 47100 PJ, Selangor, Malaysia)
Phone: +60-3-7660-8022 (Malaysia)

Recommended use of the chemical and restrictions on use

Recommended use For Semiconductors.
Recommended restrictions For industrial use only.

Section 2: Hazard identification

Physical hazards Not classified.
Health hazards Skin sensitisation Category 1
Environmental hazards Not classified.

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements



Signal word Warning
Hazard statement May cause an allergic skin reaction.

Precautionary statement

Prevention Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.
Response IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage Store in a well-ventilated place.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification Not a PBT or vPvB substance or mixture.

Section 3: Composition and information of the ingredients of the hazardous chemical

3.2. Mixtures

Components	CAS #	Percent
Silver Powder	7440-22-4	80 - 100
Epoxy Resin A	9003-36-5	1 - 5
Epoxy Resin B	Trade Secret	1 - 5
Diluent	Trade Secret	1 - 5
Coupling Agent	Trade Secret	1 - 5
Dicyandiamide	461-58-5	0.1 - 1

Section 4: First-aid measures

Inhalation	Move to fresh air.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	First aid personnel must wear protective gloves/protective clothing/eye protection/face protection. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Section 5: Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Development of hazardous combustion gases or vapours possible in the event of fire.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment. Use personal protective mask and fight fire from upwind, to avoid fumes upon combustion.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Hazchem code	None.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Section 7: Handling and storage

Precautions for safe handling	Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8: Exposure controls and personal protection

Occupational exposure limits

Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations)

Components	Type	Value
Silver Powder (CAS 7440-22-4)	TWA	0.1 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Silver Powder (CAS 7440-22-4)	TWA	0.1 mg/m ³	Dust and fume.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	If contact is likely, safety glasses with side shields are recommended. Use personal safety goggles/face shield as required.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	Use personal protective mask as required.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Section 9: Physical and chemical properties

Appearance

Physical state	Solid.
Form	Paste.
Colour	Silver.
Odour	Very faint.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.

Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Specific gravity	3.0 - 5.0

Section 10: Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Keep away from heat, moisture and sunlight for quality.
Incompatible materials	Strong oxidising agents. Strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

Section 11: Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Not available.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Silver Powder (CAS 7440-22-4)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg *
Oral		
LD50	Rat	> 5000 mg/kg *

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation Due to partial or complete lack of data the classification is not possible.

Respiratory or skin sensitisation

Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Not listed.	
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may be harmful.

Section 12: Ecological information

Ecotoxicity Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components	Species	Test Results
Silver Powder (CAS 7440-22-4)		
Aquatic		
Fish	LC50 Fathead minnow	0.0019 - 0.003 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential	Not available.	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

Section 13: Disposal information

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: Transportation information

IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Hazchem code	None.
Specific precautions	Keep containers tightly closed. And avoid leaks, spills or collapse of cargo to avoid damage to containers.

Section 15: Regulatory information

Safety, health and environmental regulations specific for the product in question This chemical safety data sheet was prepared in accordance with the Malaysia OSH-CPL Regulator and Guidelines for the Formulation of a Chemical Safety Data Sheet issued by the Malaysia Department of Occupational Safety and Health. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

Active Ingredients of Pesticide Product (Pesticide Act 1974, First Schedule, as amended through October 1, 2004)

Not regulated.

CWC (Chemical Weapons Convention) Act 2005, Schedules 1-3, as amended through CWC Regulations 2007, October 5, 2007)

Not regulated.

Ozone Depleting Substances (ODS) (Environmental Quality (Prohibition on the Use of CFC and Other Gases as Propellants and Blowing Agents) Order 1993, Dec. 31, 1993)

Not regulated.

Prohibited Use of Substances [Occupational Safety and Health (Prohibition of Use of Substance) Order 1999]

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto Protocol

Not applicable.

Basel Convention

Dicyandiamide (CAS 461-58-5)

Section 16: Other information

Issue date 18-04-2012

Revision date 03-02-2020

Version No. 03

List of abbreviations Not available.

References

- ACGIH (2017)
- EPA: AQUIRE database
- NLM: Hazardous Substances Data Base
HSDB® - Hazardous Substances Data Bank
- IARC (vol. 1~117)
- Malaysia. OELs, Occupational Safety and Health (Use & Standards of Exposure of Chemical Hazardous to Health) OSH-USECHH Regulations 2000: Schedule 1
- Malaysia. CSDS Guidelines, Occupational Safety and Health (Classification, Packaging and Labeling of Hazardous Substances) Regulations 1997

Disclaimer

SUMITOMO BAKELITE CO., LTD. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use