SAFETY DATA SHEET



according to Workplace Safety and Health Regulations Singapore

Fast-Metal Minute Adhesive Resin

Section 1. Identification

Product identifier	:	Fast-Metal Minute Adhesive Resin
Product code	:	105511

Relevant identified uses of the substance or mixture and uses advised against

Epoxy resins

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 255 48157 Münster Germany Phone: +49 251 93220 Fax: +49(0)251 / 9322 - 244 Internet: www.weicon.de
e-mail address of person responsible for this SDS	: msds@weicon.de
Emergency telephone number	 EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English) TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

Section 2. Hazards identification

Classification of the	: SKIN CORROSION/IRRITATION - Category 2
substance or mixture	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements, including precautionary statements

Hazard pictograms	
Signal word	: Warning
Hazard statements	 H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	 P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling.
Response	 P391 - Collect spillage. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: P501 - Dispose of waste according to applicable legislation.
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Section 2. Hazards identification

Other hazards which do not : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	≥25 - ≤50	25068-38-6

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>ects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/sym</u>	ptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
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Section 4. First aid measures

Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It

Wash contaminated clothing thoroughly with water before removing it, or wear

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

gloves.

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	iv	e equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry
	material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits None.	
Appropriate engineering : controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure : controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	

Section 8. Exposure controls/personal protection

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Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber ; 4 - 8 hours (breakthrough time): Viton®/butyl rubber
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Color	:	Black.
Odor	:	Ethereal.
Odor threshold	:	Not available.
рН	:	Not applicable.
Melting point/freezing point	:	Not available.
Boiling point, initial boiling	:	>100°C (>212°F)
point, and boiling range		
Flash point	:	Closed cup: >93.3°C (>199.9°F)
Evaporation rate	:	Not available.
Flammability	:	Not available.
Lower and upper explosion	:	Not available.
limit/flammability limit		
Vapor pressure	:	

Vapor pressure

	V	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	0	0	EU A.4				
Relative vapor density	: Not ava	ailable.					
Relative density	: Not ava	ailable.					
Density	: 1.74 g/	cm³ [20°C	(68°F)]				
Solubility(ies) Not available.	:						
Solubility in water	: Not ava	ailable.					
liscible with water	: No.						
Partition coefficient: n- octanol/water	: Not app	olicable.					
Auto-ignition temperature	: Not app	olicable.					
Decomposition temperature	: Not ava	ailable.					
/iscosity	: Kinema	atic (40°C (104°F)): >10000 r	nm²/s (>10000 (cSt)		

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: 10/20/2022

Section 9. Physical and chemical properties

Flow time (ISO 2431): Not available.Particle characteristicsMedian particle size: Not applicable.

Section 10. Stability and reactivity

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Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SADT	: Not available.
Castion 11 Taxia	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health effects

Section 11. Toxicological information

Section 11. Toxico	logical information	
Eye contact	: Causes serious eye irritation.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	: No known significant effects or critical hazards.	
Symptoms related to the phy	ical, chemical and toxicological characteristics	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: No specific data.	
Skin contact	: Adverse symptoms may include the following: irritation redness	
Ingestion	: No specific data.	
Delayed and immediate effe	s and also chronic effects from short and long term exposure	
<u>Short term exposure</u>		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Long term exposure		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Potential chronic health eff	<u>ets</u>	
Not available.		
General	: Once sensitized, a severe allergic reaction may occur when subsequently expose to very low levels.	sed

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.

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Teratogenicity	: No known significant effects or critical hazards.

- **Developmental effects** : No known significant effects or critical hazards.
- **Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Acute toxicity estimates

Not available.

Section 12. Ecological information

<u>Toxicity</u>

Not available.

Persistence/degradability

Not available.

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	2.64 to 3.78	31	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or linear mov ratein some product residuer. Avoid disposed of spilled material and
	liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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UN	IMDG	ΙΑΤΑ	ADR/RID		
UN3082	UN3082	UN3082	UN3082		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)	Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)		
9	9	9	9		
	111	111			
Yes.	Yes.	Yes.	Yes.		
	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin) 9 9 0 0 1 1 1 1	UN3082UN3082UN3082UN3082ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)99IIIIII	UN3082UN3082UN3082ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin)999IIIIIIIIIIIIIIIIII		

Additional information

UN

This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
 Special provisions 274, 331, 335, 375

Section 14. Transport information

IMDG	:	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F Special provisions 274, 335, 969
ΙΑΤΑ	:	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Quantity limitation Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964. Special provisions A97, A158, A197
ADR/RID	:	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Hazard identification number 90 Limited quantity 5 L Special provisions 274, 335, 601, 375 Tunnel code (-) ADR Classification Code: M6
Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
French art in bulk according		Net eveileble

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list					
Australia	: All compon	ents are listed or exempt	ed.		
Canada	: At least one NDSL.	e component is not listed	in DSL but all such o	components are listed in	
China	: All compon	ents are listed or exempt	ed.		
Eurasian Economic Union	: Russian F	ederation inventory: All	components are liste	ed or exempted.	
Japan	•	entory (CSCL): Not deter entory (ISHL): Not deterr			
New Zealand	: All compon	ents are listed or exempt	ed.		
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Section 15. Regulatory information

Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: All components are listed or exempted.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

<u>History</u>	
Date of printing	: 5/14/2023
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Version	: 3.02
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

References : Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.