

**SAMRAT POLY RESINS**

Manufacturer of Coating & Composite Resins · Doraha, Ludhiana, Punjab, India

SAFETY DATA SHEET

Doc. Ref: SPR-SDS-EPH · Rev. 01 · Issue Date: 8 August 2026

EPOXY HARDENER**Polyamide Curing Agent for Epoxy Systems · Clear, Low Viscosity · Solvent-Free, Low Yellowing****LIKELY THE 'PART B' FOR CLEAR CASTING RESIN / EPOXY ART RESIN — CONFIRM TO CROSS-REFERENCE**

This product's mix ratio (2:1, resin:hardener) and application language ('Epoxy art and river tables,' 'Clear casting and laminating') closely match this company's Clear Casting Resin (Epoxy) and Epoxy Art Resin — both of which flagged their own Part B hardener as an unconfirmed, undisclosed composition in their own SDS documents. This is very likely the actual Part B for one or both products, but this has NOT been explicitly confirmed by the manufacturer as the same hardener — recommend Harman/Jaspal confirm this connection so the other two SDS documents' 'hardener composition not established' flags can be formally resolved and cross-referenced.

Epoxy Hardener is a polyamide (amine-based) curing agent formulated for use with compatible two-part epoxy resin systems. The manufacturer's TDS confirms a clear/transparent liquid, mixed with epoxy resin at a 2:1 ratio (Resin : Hardener) by weight, with a 30–60 minute pot life and full cure in approximately 24 hours. Recommended applications include epoxy art and river tables, clear casting and laminating, FRP composites and industrial flooring, and adhesives and protective coatings. It is intended for industrial and professional use only, always mixed with a compatible epoxy resin per the resin manufacturer's specified ratio — this product is not used alone.

No food-safety, medical, or other application claim is made beyond what the manufacturer's TDS explicitly states.

SECTION 1: IDENTIFICATION**1.1 Product Identifier**

Product Name	Epoxy Hardener
Product Type	Polyamide (amine-based) epoxy curing agent
Chemical Family	Polyamide curing agent — reaction product type; not an unsaturated polyester/styrene resin, not MEKP/an organic peroxide, and not the epoxy resin itself
Product Code / Internal Reference	EPH
SDS Document Reference	SPR-SDS-EPH, Rev. 01

1.2 Relevant Identified Uses and Uses Advised Against

- Recommended use: Curing agent for compatible two-part epoxy resin systems — epoxy art and river tables, clear casting and laminating, FRP composites and industrial flooring, and adhesives and protective coatings. Always used mixed with a compatible epoxy resin at the resin manufacturer's specified ratio; not used alone.
- Uses advised against: Food-contact, medical, pharmaceutical, or other applications not specifically approved by the manufacturer; use outside the specified 2:1 (resin:hardener by weight) mixing ratio without confirming compatibility with the specific resin used; any use not confirmed with Samrat Poly Resins technical staff.

1.3 Details of the Supplier of the Safety Data Sheet

Company Name	Samrat Poly Resins
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Registered Activity	Manufacturer of Coating & Composite Resins (ISO 9001:2015 certified)
Address	Oswal Road, Near GT Road, Doraha, Ludhiana — 141421, Punjab, India
GST No.	03ALBPS3446G1ZB
Website	samratpolyresins.in
Email	info@samratpolyresins.in

1.4 Emergency Telephone Number

Company Emergency Contact	+91 74638 81652
National Poison Information Centre (India)	1800-116-117 (Toll-Free, 24x7) — National Poisons Information Centre, AIIMS New Delhi

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Substance or Mixture (GHS)

Hazard Class	Category	H-Statement
Skin irritation	Category 2	H315 — Causes skin irritation
Eye irritation	Category 2A	H319 — Causes serious eye irritation
Skin sensitisation	Category 1	H317 — May cause an allergic skin reaction
Specific target organ toxicity — single exposure	Category 3 (respiratory tract irritation)	H335 — May cause respiratory irritation
Hazardous to the aquatic environment — chronic	Category 2	H411 — Toxic to aquatic life with long lasting effects

This is an INDICATIVE classification, grounded in this product's confirmed hardener chemistry (polyamide, amine-based, per manufacturer TDS) cross-referenced against five independent, published SDS documents for comparable polyamide/amine-type epoxy curing agents, which consistently show this H315/H319/H317 pattern, several also showing H335 and/or aquatic chronic classification (H411/H412). This is a materially stronger basis than a blank 'not established' — but it is still not a substitute for manufacturer-specific testing of this exact formulation, and Jaspal should confirm or correct it. Polyamide curing agents are, as a class, generally regarded in the industry as less aggressive (less corrosive, lower sensitisation potential) than simple low-molecular-weight aliphatic amine hardeners (e.g. TETA, DETA used alone) — but 'less aggressive than the harshest alternative' is not the same as 'non-hazardous,' and the pattern above should be treated as a real, credible starting point, not dismissed.

2.2 Label Elements

Signal Word	WARNING (indicative, based on the classification pattern above)
Pictograms	GHS07 (Exclamation Mark) — irritation and sensitisation; GHS09 (Environment) if the aquatic chronic classification is confirmed
Hazard Statements	H315, H317, H319, H335, H411 (indicative — see 2.1)
Precautionary Statements — Prevention	P261, P264, P271, P272, P273, P280
Precautionary Statements — Response	P302+P352, P305+P351+P338, P321, P333+P313, P362+P364
Precautionary Statements — Storage	P405
Precautionary Statements — Disposal	P501

2.3 Other Hazards

- Repeated or prolonged skin contact is the primary concern for this chemistry class — skin sensitisation (H317, indicative) can develop after repeated exposure even where individual contacts cause no visible reaction, and once sensitised, a person may react to much lower future exposures.
- Mixing with epoxy resin initiates an exothermic curing reaction — see Sections 7 and 10. This product is never used unmixed as a final product.
- This is NOT the epoxy resin, NOT MEKP, and NOT an organic peroxide — do not apply this company's polyester resin or MEKP Hardener SDS information to this product, or vice versa.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration	Function
Polyamide curing agent (reaction product of polymerised fatty acids and polyamines — typical synthesis route for this chemistry class, per general industry knowledge; not confirmed as this manufacturer's exact raw materials)	Not assigned — polyamide curing agents are reaction-product/UVCB-type substances of variable composition, not single defined substances with one CAS number	Major component / balance of product	Primary curing agent; reacts with ep during mixing to initiate cure. Amine mg KOH/g, per manufacturer TDS - Section 9 for what this indicates.

CHEMISTRY CLASS CONFIRMED — EXACT RAW MATERIALS NOT DISCLOSED

The manufacturer's TDS confirms this is a polyamide, amine-based curing agent — real, useful chemistry information, more specific than what was available for this company's Clear Casting Resin or Epoxy Art Resin hardeners. It does not, however, disclose the exact fatty-acid/polyamine raw materials, so no CAS number is assigned to the reaction product itself, consistent with standard practice for this substance type.

SECTION 4: FIRST-AID MEASURES

4.1 Description of First-Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do — continue rinsing. Seek medical attention — this product is indicatively classified as causing serious eye irritation (H319).
Skin Contact	Wash with plenty of water. Remove contaminated clothing. If skin irritation or rash occurs, get medical advice/attention — this product is indicatively classified for skin irritation (H315) and skin sensitisation (H317). Do not wait for symptoms to worsen before seeking advice if a rash develops after repeated exposure.
Inhalation	Move to fresh air if respiratory irritation occurs (indicative H335). Seek medical attention for persistent symptoms.
Ingestion	Rinse mouth. Do not induce vomiting. Seek medical advice for significant ingestion or if symptoms occur.

4.2 Most Important Symptoms and Effects, Acute and Delayed

- Skin: irritation on contact; allergic sensitisation reaction (rash, itching) may develop after repeated exposure, sometimes with a delay — this is a well-documented pattern for amine-type epoxy curing agents as a class.
- Eyes: irritation, redness, discomfort on contact.
- Inhalation: possible respiratory tract irritation, particularly with prolonged exposure or inadequate ventilation.

4.3 Notes to Physician

Treat symptomatically. Symptoms of skin sensitisation may be delayed after repeated exposure — ensure treating personnel are aware of this if a worker presents with a skin reaction after a period of regular handling rather than a single acute exposure.

SECTION 5: FIRE-FIGHTING MEASURES

This product is described as solvent-free, per the manufacturer's TDS, which reduces (though does not by itself eliminate) the likelihood of a significant flammable-liquid hazard compared to solvent-cut hardener formulations. No flash point is disclosed, so flammability classification remains genuinely undetermined rather than assumed either way.

5.1 Extinguishing Media

- Suitable: Foam, dry chemical, carbon dioxide (CO2), water fog/spray for cooling containers.

5.2 Special Hazards Arising from the Substance or Mixture

Combustion or decomposition may produce carbon monoxide, carbon dioxide, oxides of nitrogen (given the amine-based chemistry), smoke, and irritating fumes. Styrene vapours and organic peroxide decomposition, relevant to this company's polyester resin and MEKP products, are NOT expected for this amine-based hardener.

5.3 Advice for Fire-Fighters

- Use suitable protective equipment and self-contained breathing apparatus (SCBA) as a general precaution.
- Cool fire-exposed containers with water spray from a safe distance where practical.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- Restrict unnecessary access to the spill area. Provide adequate ventilation.
- Avoid skin and eye contact — wear suitable PPE as described in Section 8 before attempting clean-up, given the indicative skin sensitisation classification.

6.2 Environmental Precautions

- Prevent entry into drains and waterways — this product carries an indicative aquatic chronic classification (H411).
- Notify the relevant Pollution Control Board and site EHS personnel for any spill that reaches, or is likely to reach, a drain or waterway.

6.3 Methods and Material for Containment and Cleaning Up

- Absorb using a suitable inert absorbent. Transfer into correctly labelled waste containers.
- Do not allow spilled hardener to contact epoxy resin in an uncontrolled manner — this initiates the exothermic curing reaction (see Section 10).
- Dispose through authorised waste channels — see Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

- Avoid skin and eye contact. Given the indicative skin sensitisation classification, prioritise preventing repeated skin exposure specifically, not just single-incident contact.
- Maintain adequate ventilation.
- Keep this hardener clearly identified and segregated from the epoxy resin except for controlled, intentional mixing at the specified ratio. Do not interchange lids, scoops, pumps, or tools between resin and hardener containers.
- Follow the resin manufacturer's specified mixing ratio (2:1, resin:hardener by weight, per this product's own TDS) and processing guidance.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Temperature	15–30°C, per manufacturer TDS.
Storage Conditions	Store in a cool, dry place; keep container tightly closed, per manufacturer TDS.
Shelf Life	12 months in unopened container, per manufacturer TDS.
Incompatible Materials	Strong oxidising agents, strong acids (amine-based products are basic/alkaline)

in nature and will react with acids). Keep away from epoxy resin except for controlled, intentional mixing at the point of use.

Packaging Material

20 kg pack, per manufacturer TDS.

7.3 Specific End Use(s)

Curing agent for compatible two-part epoxy resin systems, mixed at 2:1 (resin:hardener) by weight. Refer to the product TDS (SPR-TDS-EPH) for pot life (30–60 minutes at 25°C) and full cure time (approx. 24 hours at 25°C). Always confirm compatibility with the specific epoxy resin being used — this SDS does not confirm compatibility with any resin beyond what is stated in Section 1.1.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

No specific occupational exposure limit is established for this reaction-product substance. Control exposure through the engineering controls and PPE below, applying good industrial hygiene practice for amine-type curing agent handling — particularly around repeated skin contact, given the indicative sensitisation classification.

8.2 Exposure Controls

- Engineering controls: General ventilation; local exhaust ventilation where vapour or mist may occur.
- Eye/face protection: Chemical splash goggles.
- Hand protection: Chemical-resistant gloves suited to amine-type hardener handling (e.g. nitrile is a common general-purpose choice, though glove breakthrough time should ideally be confirmed against this specific product). Given the sensitisation risk, inspect gloves for damage and replace regularly — do not rely on a single pair for extended periods.
- Body protection: Protective clothing, changed promptly if contaminated.
- Respiratory protection: Use appropriate respiratory protection where ventilation is inadequate or workplace assessment requires it.
- General hygiene: Wash hands and exposed skin thoroughly after handling and before breaks. Given the sensitisation classification, this is a genuine control measure, not just routine hygiene — treat it accordingly. Provide readily accessible eyewash and safety shower facilities.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear / transparent liquid, per manufacturer TDS
Odour	Not established — no odour data provided in the manufacturer's TDS. Amine-based curing agents commonly have a characteristic ammonia-like or fishy odour as a class, though this is not confirmed for this specific product
pH	Not established numerically, though expected to be alkaline/basic in nature given amine-based chemistry — see Section 10 incompatibility with acids
Melting / Freezing Point	Not established
Initial Boiling Point / Range	Not established
Flash Point	Not established — no product-specific value provided in the manufacturer's TDS. This product is described as solvent-free, which reduces the likelihood of a low flash point compared to solvent-cut hardeners, but this is not the same as a confirmed value — genuinely undetermined
Evaporation Rate	Not established
Vapour Pressure	Not established
Vapour Density	Not established
Solubility in Water	Not established — no product-specific data provided. Amine-based curing agents are commonly at least partially water-miscible as a class, though this is not confirmed for this specific product
Auto-Ignition Temperature	Not established

Viscosity	500 cPs at 25°C, per manufacturer TDS
Mix Ratio	2:1 (Resin : Hardener) by weight, per manufacturer TDS — chemist-verified
Pot Life	30–60 minutes at 25°C, per manufacturer TDS
Full Cure Time	Approx. 24 hours at 25°C, per manufacturer TDS
Relative Density / Specific Gravity	0.97 g/cm ³ , per manufacturer TDS (chemist-verified). Notably less dense than water and less dense than this company's epoxy resin products (approx. 1.10 g/cm ³) — consistent with typical fatty-acid-derived polyamide curing agent chemistry
Amine Value	320 mg KOH/g, per manufacturer TDS. This is at the higher end of the typical range for commercial polyamide curing agents (generally cited in technical literature as approx. 100–300 mg KOH/g); published technical sources note that higher amine values are associated with shorter pot life, consistent with this product's relatively fast 30–60 minute pot life
VOC Content	Not established as a specific figure, though the product is described as solvent-free, per manufacturer TDS, which is informative context even without a numeric VOC value

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal storage conditions when kept separate from epoxy resin and other incompatible materials. Reacts by design with epoxy resin on mixing, initiating an exothermic curing reaction — this is the product's intended function, not a hazardous reaction in itself, but it must be managed within the resin manufacturer's mixing/casting guidance.

10.2 Chemical Stability

Stable under recommended storage conditions (Section 7). As an amine-based material, it is expected to be basic/alkaline and reactive with acids — see 10.5.

10.3 Possibility of Hazardous Reactions

EXOTHERMIC CURE ON MIXING WITH EPOXY RESIN

Mixing this hardener with epoxy resin initiates an exothermic curing reaction by design. Excessive mixed mass, unsuitable geometry, or elevated ambient temperature may increase heat generation beyond the intended margin. Follow the resin manufacturer's specified mixing ratio and casting-depth guidance — see the relevant resin product's own SDS (e.g. this company's Clear Casting Resin or Epoxy Art Resin) for specific casting-depth limits.

10.4 Conditions to Avoid

- Contamination prior to intended mixing.
- Excessive heat during storage.
- Contact with strong acids, which will react with this basic/alkaline amine-based material.

10.5 Incompatible Materials

Strong acids (acid-base reaction with this amine-based material), strong oxidising agents. Keep segregated from epoxy resin except for controlled, intentional mixing at the point of use.

10.6 Hazardous Decomposition Products

Under fire or excessive heat, may generate carbon monoxide, carbon dioxide, oxides of nitrogen, smoke, and irritating fumes, consistent with combustion of an amine-based organic material.

SECTION 11: TOXICOLOGICAL INFORMATION

The following reflects the indicative classification pattern established in Section 2, based on this product's confirmed polyamide/amine-based chemistry cross-referenced against comparable published epoxy hardener SDS documents. It is not manufacturer-specific test data for this exact formulation.

11.1 Information on Toxicological Effects

Acute Toxicity — Oral/Inhalation/Dermal	Not established with specific values; not indicatively classified as acutely toxic based on the comparable products reviewed
Skin Corrosion / Irritation	Causes skin irritation (H315, indicative) — consistent across comparable polyamide/amine curing agent SDS documents reviewed
Serious Eye Damage / Irritation	Causes serious eye irritation (H319, indicative) — consistent across comparable products reviewed. Some comparable amine-based hardeners escalate to serious eye damage (H318); this has not been confirmed either way for this specific product
Respiratory / Skin Sensitisation	May cause an allergic skin reaction (H317, indicative) — this is the single most consistent finding across the comparable polyamide/amine curing agent SDS documents reviewed, and should be treated as the primary toxicological concern for this product pending manufacturer confirmation
Germ Cell Mutagenicity	Not established; not indicated in the comparable products reviewed
Carcinogenicity	Not established; not indicated in the comparable products reviewed
Reproductive Toxicity	Not established for this product specifically. One comparable epoxy hardener product reviewed did carry a reproductive toxicity classification (H361) — this is not universal across the comparable products found, and is not assumed present here without further confirmation, but is worth Jaspal specifically checking given this precedent
STOT — Single Exposure	May cause respiratory irritation (H335, indicative) — seen in some but not all comparable products reviewed
STOT — Repeated Exposure	Not established; not indicated in the comparable products reviewed
Aspiration Hazard	Not asserted — not indicated in the comparable products reviewed

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic life with long lasting effects (H411, indicative) — based on the classification pattern seen in some comparable polyamide/amine epoxy curing agent SDS documents reviewed, though not universal across all of them. Specific LC50/EC50 data is not established for this product.

12.2 Persistence, Bioaccumulation, and Other Effects

Not established. A formal PBT/vPvB assessment has not been performed. Prevent release into drains, soil, groundwater, and surface water as a general precaution consistent with the indicative aquatic hazard classification.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

- Dispose of unused hardener through authorised industrial waste channels.
- Do not discharge to drains or waterways, consistent with the indicative aquatic hazard classification.
- Empty containers may retain hardener residue. Handle contaminated packaging appropriately.
- Mixed/cured epoxy waste should be managed according to its final cured composition and applicable waste rules.
- Follow all applicable local, state, and national regulations for disposal.

SECTION 14: TRANSPORT INFORMATION

TRANSPORT — NOT FORMALLY ESTABLISHED

Transport classification is NOT formally established, as no flash point is disclosed. However, this product is described as solvent-free with no separate volatile carrier, which makes a Class 3 (Flammable Liquid) classification less likely than for a solvent-cut hardener — this is informative context, not a confirmed 'not regulated' declaration. Do NOT use UN 1866 / RESIN SOLUTION / Class 3 / Packing Group III — that classification belongs to this company's polyester resin products. Do NOT use UN 3105 / Organic Peroxide Type D / Class 5.2 — that belongs to MEKP Hardener, a separate and unrelated product. If a dangerous-goods classification is required (e.g. for the indicative skin sensitisation/eye irritation hazard), Class 8 (Corrosive) or Class 9 (Miscellaneous/Environmentally Hazardous) may be more relevant starting points to investigate than Class 3, given this product's actual hazard pattern — but this requires confirmation by a licensed DG consultant using the actual formulation, not assumption from this SDS.

UN Number

Not established — requires formal DG classification using actual composition and test data (including flash point)

Special Precautions for User

Transport in tightly closed, properly labelled containers, separate from epoxy resin. Do not transport pre-mixed.

SECTION 15: REGULATORY INFORMATION**15.1 India**

- General workplace chemical-safety requirements under the Factories Act, 1948 and applicable State Factory Rules apply to industrial handling of this product.
- This product is not subject by default to the styrene-specific occupational exposure requirements, flammable-liquid handling/storage rules under MSIHC 1989, or organic peroxide provisions applied to this company's polyester resin and MEKP products — those apply to chemically different products.
- Given the indicative skin sensitisation classification, workplace skin-exposure prevention practices are recommended as a matter of occupational health good practice, independent of any specific regulatory citation.
- Users must comply with all applicable local, state, national, and transport regulations.

15.2 Claims Not Made

This SDS does not claim formal third-party toxicological certification, REACH registration, or any regulatory approval beyond what the manufacturer's TDS states. The classification in Section 2 is indicative, based on comparable published products, and should be formally confirmed before being relied upon for regulatory labelling purposes.

SECTION 16: OTHER INFORMATION**Full Text of Hazard (H) Statements Referenced in Section 2**

- H315 — Causes skin irritation
- H317 — May cause an allergic skin reaction
- H319 — Causes serious eye irritation
- H335 — May cause respiratory irritation
- H411 — Toxic to aquatic life with long lasting effects

Abbreviations

CAS = Chemical Abstracts Service · DG = Dangerous Goods · GHS = Globally Harmonized System of Classification and Labelling of Chemicals · KOH = Potassium Hydroxide (used in amine value determination) · MEKP = Methyl Ethyl Ketone Peroxide (a different, unrelated product) · PBT/vPvB = Persistent, Bioaccumulative and Toxic / very Persistent, very Bioaccumulative · SDS = Safety Data Sheet · TDS = Technical Data Sheet · UVCB = Substance of Unknown or Variable composition, Complex reaction products, or Biological materials.

Revision Information**SDS Version / Revision No.**

01

Issue Date

8 August 2026

Prepared By	Samrat Poly Resins / Regulatory Department
Reason for Issue	Initial official issue

This SDS has been prepared based on available technical data, manufacturer/chemist-reviewed product information, component hazard data, and applicable safety references. The information is provided for safe handling, storage, transport, use, and disposal of the product. The hazard classification in Section 2 is indicative, grounded in this product's confirmed chemistry (polyamide, amine-based) cross-referenced against comparable published industry SDS documents — it is not manufacturer-specific test data and should be formally confirmed by Jaspal before being relied upon for regulatory labelling. Users are responsible for confirming suitability for their specific application and for compliance with current regulations at the time of use.