Section1. Identification

- **Product name :** Fiber Polyester Putty (El-Mohandes)

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

- **Identified uses :** Coating components for professional use.
- **Uses advised against :** This product is designed for metal and automotive application by professional painters only, in accordance with the manufactures' instructions specified in the technical data sheet.
- **Supplier's details :** EL-Mohandes Company for Trading & Manufacturing Chemicals
  Janaklis, Abu EL-Matamer Behira, EGYPT
  info@el-mohandes.com
- **Product information :** Product safety department
- **Emergency telephone number :** During regular working hours : 002 01021112629

Section 2. Hazards identification

- **OSHA/HCS status :** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **Classification of the substance or mixture :**
  FLAMMABLE LIQUIDS - Category 3
  ACUTE TOXICITY (inhalation) - Category 4
  SKIN IRRITATION - Category 2
  EYE IRRITATION - Category 2A
  CARCINOGENICITY - Category 2
  TOXIC TO REPRODUCTION - Category 2
  TOXIC TO REPRODUCTION (Unborn child) - Category 2
  SPECIFIC TARGET ORGAN TOXICITY ((REPEATED EXPOSURE) Category 1
- **GHS label elements**
- **Hazard pictograms :**

Section 2. Hazards identification

- **Signal Word :** Danger
- **Hazard Statements :**
H226 - Flammable liquid and vapor.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H332 - Harmful if inhaled..
H351 - Suspected of causing cancer.
H361 - Suspected of damaging fertility or the fetal.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- **prevention :**
P201- Obtain special instructions before usage.
P202 - Do not handle until all safety precautions have been read and understood.
P280- Wear protective gloves. Wear eye or face protection equipment. Wear protective clothing.
P210 - Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.No Smoking.
P241-Use an explosion-proof electrical,ventilating,lighting and material handling equipment.
P242-Use only non-sparking tools.
P243-Take precautionary measures against static discharge.
P233-Keep container tightly closed.
P271-Use only outdoors or in a well-ventilated area.
P261-Avoid breathing vapor.
P264-Wash hands thoroughly after handling.
P272(OSHA)-Contaminated work clothing must not be allowed out of the workplace.

- **Response :**
P308+P313- If exposed or concerned : Get medical attention.
P304+P340+P312-IF INHALED : Remove the person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or physician if you feel unwell.
P303+P361+P353 - If on skin (hair) :Take off immediately all contaminated clothing and rinse the skin with water or shower.
P302+P352+P363 - If on skin: Wash with plenty of soap and water.
Wash contaminated clothing before reuse.
P333+P313- If skin irritation or rash occurs : Get medical attention.
P305+P351+P338 - If in the 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 attention.

- **Storage :** P 405-Store in a locked up place.
  P403-Store In a well-ventilated place.
  P235-Keep cool.
- **Disposal :** P501-Dispose of contents and container in accordance with all local, regional, national, and international regulations.
- **Hazards not other wise classified :**
  Not known.

Section 3. Composition/information on ingredients

Ingredient Name	%	CAS number
Styrene	25-30	100-42-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentration applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in section 8.

Section 4. First aid measures

- **Eye contact :** Immediately flush eyes with plenty of water while occasionally lifting the upper and lower eyelids. Check any contact lenses and remove them.
- **Inhalation :** Remove victim to fresh air and keep at rest in a comfortable position for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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 :**	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse .
• **Ingestion :**	Wash out mouth with water. Remove dentures if any. If the material has beenswallowed 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. 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 acute and delayed important symptoms/effects
Potential acute health effects

• **Eye contact :**	Causes serious eye irritation
• **Inhalation :**	Harmful if inhaled.
• **Skin contact :**	Causes skin irritation
• **Ingestion :**	No known significant effects or critical hazards.

Indication of immediate medical 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

• Suitable extinguishing Media :	Use dry chemical, CO_2, water spray (fog) or foam.
• Unsuitable extinguishing Media :	Do not use water jet.
• Specific hazards arising :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazards. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion
• Hazardous thermal decomposition products :	Decomposition products may include the following materials: Carbon dioxide Carbon monoxide Sulfur oxides Metal oxide/oxides
• Special protective actions for fire-fighter :	Promptly isolate the scene by evacuating all persons from the vicinity of incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
• 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

- **Person-related safety precautions :**
  Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection :**
  Do not allow the product to reach sewage system or any watercourse. Inform respective authorities in case of seepage into watercourse or sewage system. Do not allow it to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting :**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents.

Section 7. Handling and storage

- **Handling :**
- **Information for safe handling :**
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- **Information about fire - and explosion protection :**
  Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- **Storage :**
- **Requirements to be met by storerooms and receptacles :**
  Store in cool location.
- **Information about storage in one common storage facility :**
  Not required.
- **Further information about storage conditions :**
  Keep container tightly sealed.
  Store in cool, dry conditions in well-sealed receptacles.

Section 8. Exposure Controls/personal protection

Ingredient Name	Exposure Limits
Styrene	**ACGIH TLV (United States, 3/2020). Ototoxicant.** TWA: 10 ppm 8 hours. STEL: 20 ppm 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** TWA: 50 ppm 8 hours. TWA: 215 mg/m^3 8 hours. STEL: 100 ppm 15 minutes. STEL: 425 mg/m^3 15 minutes. **OSHA PEL Z2 (United States, 2/2013).** TWA: 100 ppm 8 hours. CEIL: 200 ppm AMP: 600 ppm 5 minutes. **NIOSH REL (United States, 10/2016).** TWA: 50 ppm 10 hours. TWA: 215 mg/m^3 10 hours. STEL: 100 ppm 15 minutes STEL: 425 mg/m^3 15 minutes.

- **Appropriate engineering controls :**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor, or dust concentrations below any lower explosive limits. Use an explosion-proof ventilation equipment.

- **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.

- **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

- **Hand protection :** Chemical-resistant and 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 using 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 various glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

- **Body protection :** Personal protective equipment for the body should be selected based on the task being performed and the risks involved. They should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the best protection from static discharges, clothing should include anti-static overalls, boots, and gloves.

- **Other skin protection :** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. They 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.

Section 9. Physical and chemical properties

Appearance	
Physical state :	Fluid.
Color :	According to product specification.
Odor :	Not available.
Odor threshold:	Not available.
PH :	Not applicable.
Melting point :	Not applicable.
Boiling point :	145 °C
Flash point :	Closed cup: 31°C (87.8°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive	Not available.
(flammable) limits	
Vapor pressure :	0.12 kPa (0.9 mm Hg)
Vapor density :	Not available.
Density :	1.800 g/cm^3
Solubility :	Very slightly soluble in the following materials: cold water.
Partition coefficient : n- octanol/water	Not applicable.
Auto-ignition temperature :	490°C (914°F)

Section 10. Stability and reactivity

- **Reactivity :** No specific test data related to reactivity available are 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 :** Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
- **Incompatible materials :** Reactive or incompatible with he following materials : Oxidizing materials
- **Hazardous decomposition products :** Under normal conditions of storage and use, hazardous decomposition of products should not happen.

Section 11. Toxicological information

Potential acute health the effects

- **Eye contact :** Causes serious eye irritation.
- **Inhalation :** Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- **Skin contact :** Causes skin irritation. May cause allergic skin reaction.
- **Ingestion :** Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics.

- **Eye contact :** Adverse symptoms may include the following:
  Pain or irritation
  Watering
  Redness

- **Inhalation :** Adverse Symptoms May Include The Following:
  Respiratory tract irritation
  Coughing
  Nausea or vomiting
  Headache
  Drowsiness /fatigue
  Dizziness/vertigo
  Unconsciousness
  Reduced fetal weight
  Increase in fetal deaths
  Skeletal malformations
- **Skin contact :** Adverse symptoms may include the following :
  Irritation
  Redness
  Reduced fetal weight
  Increase fetal deaths
  Skeletal malformations
- **Ingestion :** Adverse symptoms may include the following :
  Reduced fetal weight
  Increase in fetal deaths
  Skeletal malformations

Delayed, immediate effects, and chronic effects from short and long term exposure
Short term exposure

- **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 effects**
  Not available.

• **General :**	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
• **Carcinogenicity :**	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
• **Mutagenicity :**	No known significant effects or critical hazards.
• **Teratogenicity :**	Suspected of damaging the fetal.
• **Developmental effects :**	No known significant effects or critical hazards.
• **Fertility effects :**	Suspected of damaging fertility,

Numerical measures of toxicity Acute Toxicity estimates

Route	ATE value
Oral	18275.77 mg/kg
Dermal	19103.35 ppm
Inhalation(vapors)	81.38 mg/l

Section 12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains watercourses, or waterways.

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 or local authority requirements.
Dispose the surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated materias 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 liners may retain some product residues.
Vapor from product residues may create a highly flammable or explosive atmosphere inside the container.
Do not cut, weld, or grind used containers unless they have been cleaned thoroughly and internally. Avoid dispersal of spilled material, run off and contact with soil, waterways, drains, and sewers.

Section 14.Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN1866	UN1866	UN1866	UN1866	UN1866
UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
Transport hazard class(es)	3 	3 	3 	3 	3 
Packinggroup	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

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Section 15. Regulatory information

- **Labelling according to EU guidelines :**

  The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Hazard-determining components of labelling :**

  Styrene

- **Risk phrases :**

  10 Flammable.
  20 Harmful by inhalation.
  36/38 Irritating to eyes and skin.

- **Safety phrases :**

  2 Keep out of reach of children.
  9 Keep containers in a well-ventilated place.
  46 If swallowed, seek medical advice immediately and show this container or label.
  56 Dispose this material and its container to hazardous or special waste collection point.

Section 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases :**

  10 Flammable.
  11 Highly flammable.
  38 Irritating to skin.
  48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
  63 Possible risk of harm to the fetal.
  65 Harmful: may cause lung damage if swallowed.
  66 Repeated exposure may cause skin dryness orcracking.
  67 Vapors may cause drowsiness and dizziness.

- **Department issuing MSDS :**

  Product safety department

- **Contact :** Mr. Emad

• Abbreviations and acronyms :

ADR: Accord European sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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