Revision Date APRIL 2019

SAFETY DATA SHEET

Mesa Electro glue.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	Mesa Elektro glue
Product No.	Elek2.5

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

Identified uses	Highly conductive silver loaded paint for track repair and pinpoint shielding
Uses advised against	At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

1.3. Details of the supplier of the safety data sheet

Supplier

Mesaproducts Almelo V.o.f.

Orangerie 14

7609Zh Almelo

Tel: (0031) **0851304367 (tussen 10-17 uur)**

Kvk: 59420502

Btw nr: NL853473985B01
www.mesaproducts.nl or www.alleslijm.nl

1.4. Emergency telephone number Nationaal vergiftigingscentrum tel:0302748888

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

	Physical and Chemical Hazards	Flam. Liq. 2 - H225	
	Human health	STOT SE 3 - H336	Environment Not classified.

Classification (1999/45/EEC) F;R11. R67.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

Signal Word Danger

Hazard Statements

Precautionary Statements	H225	Highly flammable liquid and vapour.
	H336	May cause drowsiness or dizziness.
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P280	Wear protective gloves, eye and face protection.
Supplementary Precautionary Statements		
	P261	Avoid breathing vapour/spray.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

SILVER CAS-No.: 7440-22-4	EC No.: 231-131-3		30-60%
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC) Not classified.	
1-ETHOXYPROPAN-2-OL CAS-No.: 1569-02-4	EC No.: 216-374-5		10-30%
Classification (EC 1272/2008) Flam. Liq. 3 - H226 STOT SE 3 - H336		Classification (67/548/EEC) R10 R67	
ETHANOL CAS-No.: 64-17-5	EC No.: 200-578-6		10-30%
Classification (EC 1272/2008) Flam. Liq. 2 - H225		Classification (67/548/EEC) F;R11	
ACETONE CAS-No.: 67-64-1	EC No.: 200-662-2		5-10%

Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R66 R67
ETHYL ACETATE CAS-No.: 141-78-6	EC No.: 205-500-4	1-5%
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R66 R67

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Rinse mouth thoroughly. Get medical attention.

Skin contact

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. 4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion

Nausea, vomiting.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Alcohol resistant foam. Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

Solvent vapours may form explosive mixtures with air. May explode when heated or when exposed to flames or sparks.

Specific hazards

Due to the small packaging, the risk of inhaling gases formed in a fire is minimal.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes

ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
ETHANOL	WEL	1000 ppm	1920 mg/m3			
ETHYL ACETATE	WEL	200 ppm		400 ppm		
SILVER	WEL		0,1 mg/m3			

WEL = Workplace Exposure Limit.

ACETONE (CAS: 67-64-1)

DNEL				
Industry	Dermal	Long Term	Systemic Effects	186 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	1210 mg/m3
Industry	Inhalation.	Short Term	Local Effects	2420 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	62 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	200 mg/m3
PNEC				
Freshwater	10.6	mg/l		
Marinewater	1.06	mg/l		
Intermittent release	21	mg/l		
STP	100	mg/l		
Sediment (Freshwater)	30.4	mg/kg		
Sediment (Marinewater)	3.04	mg/kg		
Soil	29.5	mg/kg		

8.2. Exposure controls

Protective equipment

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use respiratory equipment with combination filter, type A2/P3.

Hand protection

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Silver.
Odour	Characteristic.
Solubility	Soluble in water.
Initial boiling point and boiling range (°C)	56 - 132 (132.8 - 269.6 F)
Relative density	1.44 @ 20 °c (68 F)
Vapour pressure	> 110 - 175 Pa 50°C
Flash point (°C)	12 (53.6 F) CC (Closed cup).
Auto Ignition Temperature (°C)	255 (491 F)
Flammability Limit - Lower(%)	1.3
Flammability Limit - Upper(%)	19

9.2. Other information

Volatile By Vol. (%)	50
Volatile Organic Compound (VOC)	850 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

No information required.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Other Health Effects

This substance has no evidence of carcinogenic properties.

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Prolonged or repeated exposure may cause severe irritation.

Eye contact

Irritating to eyes.

Toxicological information on ingredients.

ETHANOL (CAS: 64-17-5)

Acute toxicity:

Acute Toxicity (Oral LD50)

6200 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 20000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 8000 mg/l (vapours) Rat 4 hours

ACETONE (CAS: 67-64-1)

Acute toxicity:

Acute Toxicity (Oral LD50)

5800 mg/kg Rat

Acute Toxicity (Dermal LD50)

15800 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

76 mg/l (vapours) Rat 4 hours

ETHYL ACETATE (CAS: 141-78-6)

Acute toxicity:

Acute Toxicity (Oral LD50)

5620 mg/kg Rat

Acute Toxicity (Dermal LD50)

18000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

1620 ppmV (gas) Rat 4 hours

SILVER (CAS: 7440-22-4)

Toxic Dose 1 - LD 50

>2000 mg/kg (oral rat)

Toxic Dose 2 - LD 50

100 mg/kg (oral-mouse)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

There are no data on the ecotoxicity of this product. The product is not expected to be hazardous to the environment.

12.1. Toxicity

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish

LC50 48 hours 8140 mg/l

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 9268 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

IC50 72 hours 5000 mg/l

ACETONE (CAS: 67-64-1)

Acute Toxicity - Fish

LC50 96 hours 5540 mg/l Onchorhynchus mykiss (Rainbow trout)

LC50 96 hours 11000 mg/l Freshwater fish

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 12600 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

NOEC 96 hours 430 mg/l Freshwater algae

ETHYL ACETATE (CAS: 141-78-6)

Acute Toxicity - Fish

LC50 270 mg/l

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 2306 mg/l Daphnia magna

12.2. Persistence and degradability

Degradability

No data available.

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

Degradability

The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

Not considered mobile.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper Shipping Name	PAINT

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3

Transport Labels

14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS	F-E, S-E
Emergency Action Code	•3YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Issued By	E. Master
Revision Date	APRIL 2020
Revision	1
SDS No.	1261

Risk Phrases In Full

R10	Flammable.
R11	Highly flammable
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H319	Causes serious eye irritation.
H226	Flammable liquid and vapour.
H225	Highly flammable liquid and vapour.

H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.