



Safety Data Sheet

according to Regulation (EC 1272/2008)

SECTION 1- PRODUCT AND COMPANY INFORMATION

Product Name: WINKEL PRO W-F ALUMINUM EPOXY PUTTY (RESIN)

Product form: Mixture

Application : Adhesive

Company Identification: Y löngrnI o dJ

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SECTION 2- HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC 1272/2008)

Adverse physicochemical, human health and environmental effects

Physical hazards	Not Classified
Health hazards:	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards	Eye Dam. 1
Human health	The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008[CLP]

Pictogram



GHS 07

GHS 09

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

P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
EUH205 Contains epoxy constituents. May produce an allergic reaction.

Supplemental label information

Contains

EPOXY RESIN (Number average MW <= 700)

Supplementary precautionary statements

P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2. Mixtures

Ingredient	Cas Number	Percent
2,2'-[(1methylethylidene)bis (4,1phenyleneoxymethylene)] bisoxirane	1675-54-3	45-50%
Pigment (Mixture)-Aluminium Paste	-	30-45%
Magnesium Silica	14807-96-6	1-5%
Fused Silica	60676-86-0	1-5%

SECTION 4 - FIRST AID MEASURES

4.1. Description of first aid measures

General information	Avoid contact with eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5 - FIRE FIGHTING MEASURE

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Irritating gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste
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disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections

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

SECTION 7 - HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions

Use only in well-ventilated areas. Handle and open container with care. Keep away from heat, sparks and open flame. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Ingredient comments

DNEL

WEL = Workplace Exposure Limits
2,2'-[(1methylethylidene)bis(4,1phenyleneoxymethylene)] bisoxirane
Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Short term systemic effects: 12.25 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Safety glasses/goggles or face shield advised, particularly when work overhead.

Hand protection

Wear rubber or plastic coated gloves, however due to its concept of packaging, the material unmixed should not be in contact with skin.

Skin protection

Wear suitable protective clothing. Wash hand after each work period and before eating.

Hygiene measures

Provide eyewash station. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9 - PHYSICAL DATA

9.1. Information on basic physical and chemical properties

Form:	Paste
Appearance / color:	Sliver Gray
Odor:	LOW
pH(concentrate):	Not applicable.
Boiling Point/Range(°C)	Not determined.
Flash Point(closed, °C)	>250°C
Autoflammability(°C)	Not determined.
Explosive Properties(%)	Not known.
Vapour Pressure (kPa at 20 °C) :	<0.1
Relative Density(at 20°C)	2.80-2.85
Water Solubility:	Insoluble.

Fat Solubility: Not determined.

NOTE:

The physical data represented above are typical values and should not be construed as a specification.
For additional physical data and details on use, please obtain a technical data sheet for this product.

SECTION 10- STABILITY AND REACTIVITY DATA

Conditions to avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in a large mass as the ensuing exothermic reaction may produce heat.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Skin contact

Irritating to skin. May cause sensitisation by skin contact. The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact

Irritating to eyes.

Acute and chronic health hazards

The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

Route of entry

Inhalation Ingestion. Skin and/or eye contact

Acute toxicity:

· LD/LC50 values relevant for classification:

1675-54-3 reaction product: 2,2'-[(1-methylethylidene)bis

(4,1-phenyleneoxymethylene)] bisoxirane

Oral LD50 >2000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

· Skin corrosion/irritation:

Causes skin irritation.

Rabbit: irritating to the skin (OECD 404)

· Serious eye damage/eye irritation:

Causes serious eye irritation.

Rabbit: irritating to the eye (OECD 405)

· Respiratory or skin sensitization:

May cause an allergic skin reaction.

Mouse (Local Lymph Node Assay): Sensitizing to the skin (OECD 429)

· Germ Cell Mutagenicity: Not classified based on available data.

· Carcinogenicity: Not classified based on available data.

· Reproductive Toxicity: Not classified based on available data.

· Specific Target Organ Toxicity - Single Exposure (STOT SE): Not classified based on available data.

· Specific Target Organ Toxicity - Repeated Exposure (STOT RE):

Not classified based on available data.

· Aspiration Hazard: Not classified based on available data.

· Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU

Classification Guidelines for Preparations as issued in the latest version:

Irritant

Skin corrosion/irritation:

Causes skin irritation.

Serious eye damage/eye irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation:

May cause an allergic skin reaction

Respiratory sensitisation:

Not classified based on available information.

Germ cell mutagenicity:

Not classified based on available information.

Carcinogenicity:

Not classified based on available information.

Reproductive toxicity:	Not classified based on available information.
STOT - single exposure:	Not classified based on available information.
STOT - repeated exposure:	Not classified based on available information.
Aspiration toxicity:	Not classified based on available information.

SECTION 12 - ECOLOGICAL INFORMATION

12.1. Toxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Do not discharge into drains or watercourses or onto the ground.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products: Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Contaminated Packaging: Improper disposal or reuse of this container may be dangerous and illegal.

SECTION 14 - TRANSPORT INFORMATION

14.1. International Transport Regulations

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE:

Shipping name:	None Allocated
UN No:	None Allocated
Hazchem Code:	None Allocated
Pkg Group	None Allocated
DG Class:	None Allocated
Subsidiary Risk(s):	None Allocated
EPG:	None Allocated

Classification:

Land transport ADR/RID/GGVS/GGVE: Not considered as dangerous goods.

Inland navigation AND/ADNR: Not considered as dangerous good

Transport by sea IMDG/GGVSea: Not considered as dangerous good

Air transport ICAO/IATA: Not considered as dangerous good

SECTION 15 - REGULATORY INFORMATION

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

15.2. Chemical safety assessment No chemical safety assessment has been carried out.

SECTION 16 - OTHER INFORMATION

Also refer to the safety data sheet(s) for information on other components of this product.

Waste Disposal: Dispose in accordance with Federal, State/Provincial and local regulations.

Date Prepared: 2023-JUNE

Prepare by: Technical Service Department



Safety Data Sheet

according to Regulation (EC 1272/2008)

SECTION 1- PRODUCT AND COMPANY INFORMATION

Product Name: WINKEL PRO WF ALUMINUM EPOXY PUTTY (HARDENER)

Product form: Mixture

Application : Adhesive

Company Identification: Y löngrif o dJ

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SECTION 2- HAZARDS IDENTIFICATION

2.1- Classification of the substance or mixture

Classification according to Regulation (EC 1272/2008)

Adverse physicochemical, human health and environmental effects

Physical hazards	Not Classified
Health hazards:	Skin Irrit. 2 - H315 Eye Dam. 1 - H318
Environmental hazards	Aquatic Chronic 2 - H411
Human health	The product contains an polyaminoamide. May cause sensitisation or allergic reactions in sensitive individuals.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008[CLP]

Pictogram



GHS 05

Signal word



GHS 09

Danger

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

Contains

Polyaminoamide

Supplementary precautionary statements

P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2. Mixtures

Ingredient	Cas Number	Percent
Magnesium Silica	14807-96-6	5-10%
Fused Silica	60676-86-0	35-40%
Polyaminoamide	68082-29-1	45-55%

SECTION 4 - FIRST AID MEASURES

4.1. Description of first aid measures

General information	Avoid contact with eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5 - FIRE FIGHTING MEASURE

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Irritating gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.
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Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7 - HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions	Use only in well-ventilated areas. Handle and open container with care. Keep away from heat, sparks and open flame. Good personal hygiene procedures should be implemented.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away

7.3. Specific end use(s)**Specific end use(s)**

The identified uses for this product are detailed in Section 1

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Control parameters****Ingredient comments**

DNEL

WEL = Workplace Exposure Limits

Polyaminoamide

Workers - Dermal; Short term systemic effects:-

Workers - Inhalation; Short term systemic effects: -

8.2. Exposure controls**Protective equipment****Appropriate engineering controls**

Provide adequate general and local exhaust ventilation.

Eye/face protection

Safety glasses/goggles or face shield advised, particularly when work overhead.

Hand protection

Wear rubber or plastic coated gloves, however due to its concept of packaging, the material unmixed should not be in contact with skin.

Skin protection

Wear suitable protective clothing. Wash hand after each work period and before eating.

Hygiene measures

Provide eyewash station. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9 - PHYSICAL DATA**9.1. Information on basic physical and chemical properties**

Form:	Paste
Appearance / color:	Beige
Odor:	Amine.
Melting Point/Range(°C)	Not applicable.
Flash Point(closed, °C)	>230
Oxidising Propertise:	Not determined.
Vapour Pressure (kPa at 20 °C) : 0.02	
Relative Density(at 20°C)	0.98-1.03
Water Solubility:	Miscible.
Partition Coefficient(no-ctanol/water):	Not determined.

NOTE:

The physical data represented above are typical values and should not be construed as a specification.

For additional physical data and details on use, please obtain a technical data sheet for this product.

SECTION 10- STABILITY AND REACTIVITY DATA**Conditions to avoid:**

Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in a large mass as the ensuing exothermic reaction may produce heat.

Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Skin Contact:	Corrosive-causes .May cause sensitisation.
Eye Contact:	Causes irreversible damage to eye tissue if not removed promptly.
By Inhalation:	May cause respiratory irritation.
By Ingestion:	May cause irritation of mouth, throat and digestive tract.
Chronic:	Prolonged skin contact can result in chemical burns.

SECTION 12 - ECOLOGICAL INFORMATION

12.1. Toxicity

The product contains a substance which is harmful to aquatic organisms and which may

12.2. Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Do not discharge into drains or watercourses or onto the ground.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products:	Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
Contaminated Packaging:	Improper disposal or reuse of this container may be dangerous and illegal.

SECTION 14 - TRANSPORT INFORMATION

14.1. International Transport Regulations

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE:

Shipping name:	None Allocated
UN No:	None Allocated
Hazchem Code:	None Allocated
Pkg Group	None Allocated
DG Class:	None Allocated
Subsidiary Risk(s):	None Allocated
EPG:	None Allocated

Classification:

Land transport ADR/RID/GGVS/GGVE: Not considered as dangerous goods.

Inland navigation AND/ADNR: Not considered as dangerous good

Transport by sea IMDG/GGVSea: Not considered as dangerous good

Air transport ICAO/IATA: Not considered as dangerous good

SECTION 15 - REGULATORY INFORMATION

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

15.2. Chemical safety assessment No chemical safety assessment has been carried out.

SECTION 16 - OTHER INFORMATION

Also refer to the safety data sheet(s) for information on other components of this product.

Waste Disposal: Dispose in accordance with Federal, State/Provincial and local regulations.

Date Prepared: 2023-JUNE

Prepare by: Technical Service Department