1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Commercial Product Name	:	**WINKEL Pro WINBACK 6 ACID - Resin**
Company	:	WINKEL GmbH Lisztstraße 1 53881 Euskirchen -Germany
Telephone	:	+49 2251 77 69 400-401
Telefax	:	+49 2251 77 69 402
e-mail	:	info@winkelgroup.de
Emergency telephone number	:	112

2. HAZARDS IDENTIFICATION

Resin
Dangerous Goods Information

	Xn	Harmful
Risk Phrases	R10	Flammable
	R20/21	Harmful by inhalation and in contact with skin
	R38	Irritating to skin
Safety Phrases	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28	After contact with skin, wash immediately with plenty of water

Routes of exposure

Eye contact
Skin contact

Emergency Overview

Keep away from heat and sources of ignition
Flammable
Moderate skin irritant
Moderate eye irritant
Moderate respiratory irritant
Harmful in contact with skin

Potential Health Effects

Inhalation — May cause nose, throat and lung irritation. Inhalation of vapours and/or aerosols in high concentrations may cause irritation of respiratory system.

Eye contact	Causes eye irritation.
Skin contact	Causes skin irritation. Symptoms of overexposure may be headache, nausea, dizziness, tiredness and vomiting Harmful in contact with skin.
Chronic Health Hazard	This product contains no listed carcinogens according to Directive 67/548/EEC, IARC, ACGIH, and / or NTP in concentrations of 0.1% or greater.
Aggravated Medical Conditions	Eye disease Skin disorders and allergies Asthma
Target Organs	Skin Eyes Respiratory system

Exposure standards

Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Resin

Chemical Entity	CAS No	Percentage	Classification
Epichlohydrin, bisphenol A resin	25068-38-6	30 - 60%	R20/22
Inorganic Oxides	Proprietary	30 - 60%	
Xylene	1330-20-7	10 - 30%	Xn: R10; R20/R22; R38
Organoclay	68911-87-5	1 - 5%	

4. FIRST AID MEASURES

Resin	Seek medical advice. If breathing has stopped, give assisted respiration.
Inhalation	Remove to fresh air if effects occur. If breathing has stopped, give assisted respiration. Consult a physician.
Skin Contact	Immediately flush with plenty of water for at least 20 minutes while removing contaminated clothing. Remove residues with soap and water. Call a physician if irritation persists.
Eye Contact	Rinse immediately with plenty of water (also under eyelids) for at least 20 minutes. Remove contact lenses.
Ingestion	Never give fluids or induce vomiting if patient is unconscious or is having convulsions. The decision of whether to induce vomiting or not should be made by an attending physician. Prevent aspiration of vomit. Turn victims head to the side.
Note to Physician	No specified antidote. Application of corticosteroid cream has been effective in treating skin irritation. Supportive care. Treatment made on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

Resin

Extinguishing Media	Water fog or fine spray, Carbon dioxide, Dry chemical, Limestone powder, Foam. Alcohol resistant foams (ATC Type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Hazardous combustion products

Under conditions of incomplete combustion or pyrolysis, toxic, irritating or flammable combustion products may be evolved. The thermal decomposition products may contain carbon monoxide and phenolics and therefore should be treated as potentially hazardous substances and appropriate precautions should be taken.

Protection of Fire fighters

Wear positive-pressure self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

Unusual Fire and Explosion Hazards

Dense smoke is emitted when burned without sufficient oxygen.

6. ACCIDENTAL RELEASE MEASURES

Resin

Personal Precautions

Wear adequate personal protective equipment, see section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION.

Environmental Precautions

Flushings and wash waters must be contained and prevented from entering into soil, waterways and ground water.
If recovery is not possible, admix with dry soil, sand or non-reactive absorbent for later disposal.

Method of Cleaning Up

Cover with a suitable material, such as: Sand, polyethylene or polypropylene fibre. Collect in suitable and properly labelled containers. Dispose of according to applicable regulations; see Section 13, DISPOSAL CONSIDERATIONS. Solvents are not recommended for cleanup. Residual product may be removed using steam or hot soapy water.

7. HANDLING AND STORAGE

Resin

Handling Practice cares and cautions to avoid skin and eye contact. Avoid breathing vapours of material.

Storage Store between 10ºC and 35ºC
Keep away from acids, alkalis and oxidizers

Technical Measures / Precautions

Keep away from open flames, hot surfaces and sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Resin

Exposure Guidelines (Xylene)

Time weighted average (TWA):EH40 WEL	**50ppm**	**220 mg/m³**
Short term exposure limit(STEL):WEL	**100ppm**	**441 mg/m³**
Time weighted average (TWA): EU ELV	**50ppm**	**221 mg/m³**
Short term exposure limit(STEL): EU ELV	**100ppm**	**442 mg/m³**

Engineering Controls

Good general ventilation should be sufficient for most conditions. Maintain process conditions to ensure temperature is below product flash point.

Personal Protective Equipment

Respiratory Protection

No respiratory protection should be needed.

Skin Protection

For brief contact, no precautions other than clean body-covering clothing should be needed. Use gloves, impervious to this material when prolonged or frequently repeated contact could occur.(Butyl Rubber, Nitrile, Neoprene, Ethyl Vinyl Alcohol Laminate) Remove contaminated clothing no later than the end of the work period and launder before reuse.

Eye/Face Protection

Use safety glasses. Where contact with this material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.

9. PHYSICAL AND CHEMICAL PROPERTIES

Resin

Physical Form	Liquid
Colour	Grey
Odour	Aromatic
pH	Not Applicable
Vapour Pressure (mm Hg at 21^0C (70^0F))	7.62
Boiling Point	>91^0C (>196^0F)
Solubility in water	Slight
Specific Gravity (Water = 1)	1.4
Molecular Weight	Mixture
Flash Point	>30^0C

10. STABILITY AND REACTIVITY

Resin

Chemical Stability

Stable under normal conditions

Conditions to avoid

Heat, flames and sparks

Incompatibility (Material to Avoid)

Mineral acids (i.e. sulfuric, phosphoric, etc.). Alkalis (i.e. Sodium or Potassium Hydroxide etc.). Organic acids (i.e. Acetic acid, Citric acid etc.). Reducing agents (i.e. Hydrides, Sulfites etc.). Oxidizing Agents (i.e. Perchlorates, Nitrates etc.). Sodium or Calcium Hypochlorite.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Resin

Acute Health Hazard

Ingestion	No data available on product itself Xylene – LD50: 4 300 mg/kg
Inhalation	No data available Xylene – LC50 (4 h): 22 mg/l
Skin	No data available Xylene – LD50 : 1 700 mg/kg

Other Acute Effects

Irritation Effects Data

Skin	Moderate skin irritation
Eyes	Moderate eye irritation.

12. ECOLOGICAL INFORMATION

Resin

Bioaccumulation Low bioaccumulation potential

13. DISPOSAL CONSIDERATIONS

Resin

Disposal

This product should be reacted with the hardener of the kit to produce a substantially inert product for disposal. When being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 91/689/EEC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-law governing hazardous waste. The recommended procedure for disposing of waste products is burning under carefully controlled conditions. Burn in an adequate incinerator or bury in an approved landfill in compliance with applicable regulations. Do not dump into any sewers, on the ground, or into any body of water.

Waste or Residues

Customers are advised to check their local legislation governing the disposal of hazardous chemical waste.

Contaminated Packaging

Empty containers must be disposed of as hazardous waste unless all remaining product adhering to the container walls has been removed. Hazard warning labels can then be removed from the container walls and the container sent for recycling or disposal in accordance with local regulations. Washings must be disposed of safely and in accordance with local regulations. If the container is reconditioned, the reconditioning company should be made aware of the nature of the original contents.

14. TRANSPORT INFORMATION

Resin

ADR	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
RID	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
IMDG	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
IATA	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III

Remarks: Sample shipment not allowed by mail.

15. REGULATORY INFORMATION

Resin

Symbol **HARMFUL (Xn)**

Risk Phrases

R10	Flammable
R20/21	Harmful by inhalation and in contact with skin
R38	Irritating to skin

Safety Phrases

S36/37	Wear suitable protective clothing and gloves.
S60	This material and/or its container must be disposed of as hazardous waste.

INTERNATIONAL REGULATIONS

USA	**TSCA**	Included on Inventory
CANADA	**DSL**	Included on Inventory
EU	**EINECS**	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
AUSTRALIA	**AICS**	Included on Inventory
PHILIPPINES	**PICCS**	Included on inventory.
SOUTH KOREA	**ECL**	Included on inventory.
CHINA	**SEPA**	Included on inventory.
JAPAN	**ENCS**	Included on inventory.

16. OTHER INFORMATION

Legend

N/A Not available
W/W Weight/Weight
OEL Occupational Exposure Limit
STEL Short Term Exposure Limit
TWA Time Weighted Average
WEEL Workplace Environmental Exposure Level
HAZ_DES Hazard Designation
EU ELV EU Exposure Limit Values Data

National Fire Protection Association (U.S.A.):

Health: 1
Flammability: 1
Reactivity: 0

17. DISCLAIMER

WINKEL urges each customer or recipient of this MSDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this MSDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the customers responsibility to ensure that their activities comply with all international, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of product are not under the control of the manufacturer, it is the user's duty to determine the conditions necessary for the safe use of this product. If you have obtained an MSDS from another source or if you are not sure the MSDS you have is current, please contact us for the most current version.

Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

SAFETY DATA SHEET
WINKEL 7255 NOARDCOAT 6 ACID-Hardener
MSDS Revision Number 8
Revision Date July 2020

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Commercial Product Name	:	**WINKEL Pro WINBACK 6 ACID - HARDENER**
Company	:	WINKEL GmbH Lisztstraße 1 53881 Euskirchen -Germany
Telephone	:	+49 2251 77 69 400-401
Telefax	:	+49 2251 77 69 402
e-mail	:	info@winkelgroup.de
Emergency telephone number	:	112

2. HAZARDS IDENTIFICATION

Hardener
Dangerous Goods Information

	Xn	Harmful
Risk Phrases	R10	Flammable
	R20/21	Harmful by inhalation and in contact with skin
	R38	Irritating to skin
Safety Phrases	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28	After contact with skin, wash immediately with plenty of water

Routes of exposure

Eye contact
Skin contact

Emergency Overview

Keep away from heat and sources of ignition
Flammable
Moderate skin irritant
Moderate eye irritant
Moderate respiratory irritant
Harmful in contact with skin

Potential Health Effects

Inhalation — May cause nose, throat and lung irritation. Inhalation of vapours and/or aerosols in high concentrations may cause irritation of respiratory system.

Eye contact	Causes eye irritation.
Skin contact	Causes skin irritation. Symptoms of overexposure may be headache, nausea, dizziness, tiredness and vomiting Harmful in contact with skin.
Chronic Health Hazard	This product contains no listed carcinogens according to Directive 67/548/EEC, IARC, ACGIH, and / or NTP in concentrations of 0.1% or greater.
Aggravated Medical Conditions	Eye disease Skin disorders and allergies Asthma
Target Organs	Skin Eyes Respiratory system

Exposure standards

Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hardener

Chemical Entity	CAS No	Percentage	Classification
Liquid Amine Mixture	Proprietary	> 60%	R20 / R22;
Xylene	1330-20-7	30 - 60%	Xn: R10; R20/R22; R38

4. FIRST AID MEASURES

Hardener	Seek medical advice. If breathing has stopped, give assisted respiration.
Inhalation	Remove to fresh air if effects occur. If breathing has stopped, give assisted respiration. Consult a physician.
Skin Contact	Immediately flush with plenty of water for at least 20 minutes while removing contaminated clothing. Remove residues with soap and water. Call a physician if irritation persists.
Eye Contact	Rinse immediately with plenty of water (also under eyelids) for at least 20 minutes. Remove contact lenses.
Ingestion	Never give fluids or induce vomiting if patient is unconscious or is having convulsions. The decision of whether to induce vomiting or not should be made by an attending physician. Prevent aspiration of vomit. Turn victims head to the side.
Note to Physician	No specified antidote. Application of corticosteroid cream has been effective in treating skin irritation. Supportive care. Treatment made on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

Hardener

Extinguishing Media	Water fog or fine spray, Carbon dioxide, Dry chemical, Limestone powder, Foam. Alcohol resistant foams (ATC Type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Hazardous combustion products

Under conditions of incomplete combustion or pyrolysis, toxic, irritating or flammable combustion products may be evolved. The thermal decomposition products may contain carbon monoxide, nitrogen oxide and ammonia gases and therefore should be treated as potentially hazardous substances and appropriate precautions should be taken.

Protection of Fire fighters

Wear positive-pressure self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

Unusual Fire and Explosion Hazards

Dense smoke is emitted when burned without sufficient oxygen.

6. ACCIDENTAL RELEASE MEASURES

Hardener

Personal Precautions

Wear adequate personal protective equipment, see section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION.

Environmental Precautions

Flushings and wash waters must be contained and prevented from entering into soil, waterways and ground water.
If recovery is not possible, admix with dry soil, sand or non-reactive absorbent for later disposal.

Method of Cleaning Up

Cover with a suitable material, such as: Sand, polyethylene or polypropylene fibre. Collect in suitable and properly labelled containers. Dispose of according to applicable regulations; see Section 13, DISPOSAL CONSIDERATIONS. Solvents are not recommended for cleanup. Residual product may be removed using steam or hot soapy water.

7. HANDLING AND STORAGE

Hardener

Handling Practice cares and cautions to avoid skin and eye contact.
Avoid breathing vapours of material.

Storage Store between 10ºC and 35ºC
Keep away from acids, alkalis and oxidizers

Technical Measures / Precautions

Keep away from open flames, hot surfaces and sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hardener

Exposure Guidelines (Xylene)

Time weighted average (TWA):EH40 WEL	**50ppm**	**220 mg/m³**
Short term exposure limit(STEL):WEL	**100ppm**	**441 mg/m³**
Time weighted average (TWA): EU ELV	**50ppm**	**221 mg/m³**
Short term exposure limit(STEL): EU ELV	**100ppm**	**442 mg/m³**

Engineering Controls

Good general ventilation should be sufficient for most conditions. Maintain process conditions to ensure temperature is below product flash point.

Personal Protective Equipment

Respiratory Protection

No respiratory protection should be needed.

Skin Protection

For brief contact, no precautions other than clean body-covering clothing should be needed. Use gloves, impervious to this material when prolonged or frequently repeated contact could occur.(Butyl Rubber, Nitrile, Neoprene, Ethyl Vinyl Alcohol Laminate) Remove contaminated clothing no later than the end of the work period and launder before reuse.

Eye/Face Protection

Use safety glasses. Where contact with this material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.

9. PHYSICAL AND CHEMICAL PROPERTIES

Hardener

Physical Form	Liquid
Colour	Amber
Odour	Aromatic
pH	Alkaline
Vapour Pressure (mm Hg at 21^0C (70^0F))	7.62
Boiling Point	>91^0C (>196^0F)
Solubility in water	Slight
Specific Gravity (Water = 1)	1.01
Molecular Weight	Mixture
Flash Point	>30^0C

10. STABILITY AND REACTIVITY

Hardener

Chemical Stability

Stable under normal conditions

Conditions to avoid

Heat, flames and sparks

Incompatibility (Material to Avoid)

Mineral acids (i.e. sulfuric, phosphoric, etc.). Alkalis (i.e. Sodium or Potassium Hydroxide etc.). Organic acids (i.e. Acetic acid, Citric acid etc.). Reducing agents (i.e. Hydrides, Sulfites etc.). Oxidizing Agents (i.e. Perchlorates, Nitrates etc.). Reactive metals (i.e. sodium, calcium, zinc etc.).
Sodium or Calcium Hypochlorite. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminium, zinc and galvanized surfaces. Amines. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. Nitrites, nitrosating agents.

Hazardous decomposition products
(From burning, heating, or reaction with other Materials)

Nitrogen oxide can react with water vapours to form corrosive nitric acid (TLV=2 ppm). Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. Nitrosamines, Aldehydes. Organic acid vapours. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Hardener

Acute Health Hazard

Ingestion	No data available on product itself Xylene – LD50: 4 300 mg/kg
Inhalation	No data available Xylene – LC50 (4 h): 22 mg/l
Skin	No data available Xylene – LD50 : 1 700 mg/kg

Other Acute Effects

Irritation Effects Data

Skin	Moderate skin irritation
Eyes	Moderate eye irritation.

12. ECOLOGICAL INFORMATION

Hardener

Bioaccumulation	Low bioaccumulation potential

13. DISPOSAL CONSIDERATIONS

Hardener

Disposal

This product, the hardener, should be reacted with the resin of the kit to produce a substantially inert product for disposal. When being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 91/689/EEC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-law governing hazardous waste. The recommended procedure for disposing of waste products is burning under carefully controlled conditions. Burn in an adequate incinerator or bury in an approved landfill in

compliance with applicable regulations. Do not dump into any sewers, on the ground, or into any body of water.

Waste or Residues

Customers are advised to check their local legislation governing the disposal of hazardous chemical waste.

Contaminated Packaging

Empty containers must be disposed of as hazardous waste unless all remaining product adhering to the container walls has been removed. Hazard warning labels can then be removed from the container walls and the container sent for recycling or disposal in accordance with local regulations. Washings must be disposed of safely and in accordance with local regulations. If the container is reconditioned, the reconditioning company should be made aware of the nature of the original contents.

14. TRANSPORT INFORMATION

Hardener

ADR	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
	ADR/RID Hazard No.	30
RID	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
IMDG	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III
IATA	Proper Shipping Name:	Paint Mixture
	Hazard class:	3
	Id Number (UN)	UN1263
	Packing Group:	III

Remarks: Sample shipment not allowed by mail.

15. REGULATORY INFORMATION

Hardener

Symbol **HARMFUL (Xn)**

Risk Phrases

R10	Flammable
R20/21	Harmful by inhalation and in contact with skin
R38	Irritating to skin

Safety Phrases

S36/37	Wear suitable protective clothing and gloves.
S60	This material and/or its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

Legend

N/A Not available
W/W Weight/Weight
OEL Occupational Exposure Limit
STEL Short Term Exposure Limit
TWA Time Weighted Average
WEEL Workplace Environmental Exposure Level
HAZ_DES Hazard Designation
EU ELV EU Exposure Limit Values Data

National Fire Protection Association (U.S.A.):

Health: 1
Flammability: 1
Reactivity: 0

17. INTERNATIONAL REGULATIONS

Hardener

USA	**TSCA**	Included on Inventory
CANADA	**DSL**	Included on Inventory
EU	**EINECS**	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
AUSTRALIA	**AICS**	Included on Inventory
PHILIPPINES	**PICCS**	Included on inventory.
SOUTH KOREA	**ECL**	Included on inventory.
CHINA	**SEPA**	Included on inventory.
JAPAN	**ENCS**	Included on inventory.

18. DISCLAIMER

WINKEL urges each customer or recipient of this MSDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this MSDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the customers responsibility to ensure that their activities comply with all international, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of product are not under the control of the manufacturer, it is the user's duty to determine the conditions necessary for the safe use of this product. If you have obtained an MSDS from another source or if you are not sure the MSDS you have is current, please contact us for the most current version.

Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.