SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Verdünnung MS/50 C für Knetholz MS/PK-L

Further trade names

dilution MS/50 C for plasticine wood MS/PK-L
diluizione MS/50 C per pasta legno MS/PK-L

UFI: 0KQ0-909F-T00V-T6AR

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

Use of the substance/mixture

For industry, manufacturing, consumer.
Dilution for Wood putty, liquid wood.

1.3. Details of the supplier of the safety data sheet

Company name:	BINDULIN-WERK H.L.Schönleber GmbH	
Street:	Wehlauer Str. 49-59	
Place:	D-90766 Fürth	
Telephone:	+49 (0)911 / 73104-8	Telefax: +49 (0)911 / 73104-5
e-mail:	sicherheitsdatenblatt@bindulin.com	
Responsible Department:	Abteilung Produktsicherheit BINDULIN-WERK H.L.Schönleber GmbH	

1.4. Emergency telephone number:

+49 (0)911 / 73104-9

Further Information

Available in the following office hours
Monday - Friday from 7:30am to 12:00am and 12:30am to 4:00pm

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

acetone

Signal word: Danger

Pictograms:

GHS02

GHS07

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310	IF SWALLOWED: Immediately call a doctor.
P101	If medical advice is needed, have product container or label at hand.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to waste removal facility in accordance to local regulations.

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.

Labelling of packages where the contents do not exceed 125 ml

Hazard components for labelling

acetone

Signal word: Danger

Pictograms:

GHS02

GHS07

Hazard statements

H336

Precautionary statements

P102-P301+P310-P101-P304+P340-P501

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.

Additional advice on labelling

Exceptions of (EG) No.1272/2008 Art.17 according to Annex 1, Paragraph 1.5.2 were claimed.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of the following ingredients with other substances classified as non-hazardous.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
67-64-1	acetone			> 90 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
64-17-5	ethanol			< 5 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2; H225			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Consult a doctor if symptoms persist.
Remove contaminated clothing.

After inhalation

Take the affected person into fresh air and ensure that they can breathe freely . If breathing arrest occures, give artificial respiration immediately. Call a doctor.

After contact with skin

Wash immediately with water and soap, rinse thoroughly. Remove contaminated clothing.
Do not wash with: solvents / thinners.

After contact with eyes

Rinse gently with water for a few minutes. Remove any existing contact lenses if possible. Continue rinsing. Never use force to open glued eyes. Do not forcibly remove contact lenses. Contact eye specialist / ophthalmologist immediately after.

After ingestion

Do NOT induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Drink a lot of water. Consult a doctor if symptoms persist.

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

Aspiration hazard if swallowed. May enter and damage the lungs. May cause pulmonary oedema or pneumonia.

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

Treat symptomatically. Continue to monitor for pneumonia and pulmonary oedema. In case of respiratory distress, oxygen therapy. Artificial respiration or oxygen may be necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Extinguishing powder, Sand, Carbon dioxide (CO2)
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.
The following substances can develop in the event of intensive heating / fire: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2) or other hazardous combustion products.

5.3. Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers.
Move undamaged containers from immediate hazard area if it can be done safely.
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Vapors can be heavier than air, stay close to the ground, and travel a significant distance to an ignition source.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with eyes, skin and clothing.
Provide adequate ventilation.

6.2. Environmental precautions

Do not let it get into subterranean water, water bodies or sewage systems.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handling chemicals always requires caution.
Ensure good ventilation. Avoid aerosol formation.
Avoid contact with eyes, skin and clothing.
Wash habds thoroughly before breaks / end of work.
Do not eat, drink, smoke or sniff at work.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharges.
Vapours can form explosive mixtures with air.

Further information on handling

Read label before use.
Keep out of the reach of children.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.
Keep locked up and out of reach of children.
Store in a dry, well-ventilated place.
Protect from frost, heat and direct sunlight.

Hints on joint storage

Do not store together with strong oxidizing agents.
Tenere lontano da cibo e bevande.

Further information on storage conditions

Danger of bursting / exploding (pressure increase) above 50 °C.

7.3. Specific end use(s)

Dilution for Wood putty, liquid wood.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
67-64-1	acetone			
Worker DNEL, long-term		inhalation	systemic	1210 mg/m³
Worker DNEL, acute		inhalation	local	2420 mg/m³
Worker DNEL, long-term		dermal	systemic	186 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	200 mg/m³
Consumer DNEL, long-term		dermal	systemic	62 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	62 mg/kg bw/day
64-17-5	ethanol			
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	114 mg/m³
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	950 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
67-64-1	acetone	
Freshwater		10,6 mg/l
Freshwater (intermittent releases)		21 mg/l
Marine water		1,06 mg/l
Freshwater sediment		30,4 mg/kg
Marine sediment		3,04 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		29,5 mg/kg
64-17-5	ethanol	
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		380 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg

8.2. Exposure controls




Appropriate engineering controls

Ensure good ventilation at the workplace.
Do not breathe in vapor / aerosol.
Take explosion-potential-dependent measures against electrostatic charging.

Protective and hygiene measures

Avoid contact with eyes, skin and clothing.
Remove contaminated clothing.
Wash habds thoroughly before breaks / end of work.
Do not eat, drink, smoke or sniff at work.

Eye/face protection

Suitable eye protection: Tightly fitting protective goggles according to EN 166.

Hand protection

Use chemical-resistant gloves with CE-marking and a four-digit test number.
Glove material: Nitrile rubber - layer thickness: >= 0.1 mm
Breakthrough time (maximum wearing time): > 480 min.
The information provided by the manufacturer of the protective gloves on permeability and breakthrough times must be observed.
When the first signs of wear appear, the protective gloves should be replaced.

Skin protection

Depending on the type of application.

Respiratory protection

Required when limit values are exceeded.
Provide good ventilation.
Do not breathe gas/fumes/vapour/spray.
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

In case of contamination of sewage system / surface water / ground water, inform the responsible authorities.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	sweetish
Odour threshold:	not determined
pH-Value (at 20 °C):	5 - 6

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	56 °C
Flash point:	-17 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	2,5
Upper explosion limits:	14,3
Ignition temperature:	465 °C

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density:	0,79 g/cm³
Water solubility:	not determined

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic: (at 20 °C)	0,32 mPa·s

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable. Vapours can form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Danger of bursting / exploding (pressure increase) above 50 °C. Peroxide formation possible.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not smoke.
Avoid release into the environment.

10.5. Incompatible materials

Attacks many plastics and rubber. Condensation may occur on contact with barium hydroxide, sodium hydroxide and many other alkaline materials. Keep away from acidic materials and oxidizing agents.

10.6. Hazardous decomposition products

The following substances can develop in the event of intensive heating / fire: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2) or other hazardous combustion products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-64-1	acetone				
	oral	LD50 5800 mg/kg	Rat	J Toxicol Environ Health 15: 609-621 (19	Undiluted acetone applied to female rats
	dermal	LD50 > 7426 mg/kg	Rabbit	Toxicol Appl Pharmacol 7: 559-565. (1965	other: Code of federal regulations: 21 C
	inhalation (4 h) vapour	LC50 76 mg/l	Rat		
64-17-5	ethanol				
	oral	LD50 10470 mg/kg	Rat	Study report (1976)	OECD Guideline 401
	inhalation (4 h) vapour	LC50 124,7 mg/l	Rat	Study report (1980)	OECD Guideline 403

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

STOT-single exposure
May cause drowsiness or dizziness. (acetone)

STOT-repeated exposure
Repeated exposure may cause skin dryness or cracking.

Aspiration hazard
Based on available data, the classification criteria are not met.

Additional information on tests
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
No animal testing has been carried out with the product.

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as ecotoxic. Individual components can have ecotoxicological properties. The product has not been tested for this.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
67-64-1	acetone					
	Acute fish toxicity	LC50 8120 mg/l	96 h	Pimephales promelas	Publication (1984)	OECD Guideline 203
	Acute crustacea toxicity	EC50 8800 mg/l	48 h	Daphnia pulex	Publication (1978)	The toxicity of acetone towards daphnids
	Crustacea toxicity	NOEC 2212 mg/l	28 d	Daphnia magna	Arch Environm Contam Toxicol 12: 305-310	Study conducted comparable to OECD 211 w
	Acute bacteria toxicity	(61150 mg/l)	0,5 h	activated sludge of a predominantly domestic sewag	Water Res 26: 887-892 (1992)	ISO 8192
64-17-5	ethanol					
	Acute fish toxicity	LC50 15400 mg/l	96 h	Lepomis macrochirus	Bulletin of Environmental Contamination	other: EPA-660/3-75-009, 1975
	Acute algae toxicity	ErC50 ca. 22000 mg/l	96 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 10000 mg/l	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	other: DIN 38412 Teil 11
	Fish toxicity	NOEC > 79 mg/l	100 d	Oryzias latipes	Environmental Toxicology and Chemistry,	Chronic effects of substance on reproduc
	Algae toxicity	NOEC 5400 mg/l	5 d	Skeletonema costatum	Environ Toxicol Chem 8(5):451-455. (1989	Study to determine the sensitivity of a
	Crustacea toxicity	NOEC 2 mg/l	10 d	Ceriodaphnia dubia	Arch Environ Contam Toxicol 20(2):211-21	Follows the basic methodology for the th

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	acetone	-0,23
64-17-5	ethanol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
67-64-1	acetone	3		Unpublished calculat
64-17-5	ethanol	1	Cyprinus carpio	Comparative Biochemi

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1090
14.2. UN proper shipping name:	ACETONE
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC):	100 % (790 g/l)
2004/42/EC (VOC):	100 % (790 g/l)
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H336	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information contained in this safety sheet is based on the state of our knowledge at the time of revision / creation and is provided by us to the best of our knowledge and belief. They correspond to our current level of knowledge, come from recognized sources and are state of the art at the time indicated. They are used to describe our products with regard to the safety precautions to be taken. They do not represent any assurance of properties of the product described, product information or product specification and do not establish a contractual legal relationship. The product may not be used for any purpose other than that specified in Section 1 without written approval. The user is responsible for compliance with all necessary legal regulations. BINDULIN-WERK does not take any liability whatsoever from the use of the product described here, as the given working conditions of the user are beyond our knowledge and control.

This safety data sheet is a remake and is not subject to any previous version.