# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

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

1.1 Product identifier

Trade name : MOBIHEL 2K HS HARDENER 4300

Product code : 47774901

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

Use of the Sub: Coatings and paints, thinners, paint removers

stance/Mixture

Recommended restrictions

on use

Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : KANSAI HELIOS Slovenija d.o.o.

Količevo 65 1230 Domžale Slovenia

Telephone Company : 386 (1) 722 4383

Telefax Company : 386 (1) 722 4310

Responsible/issuing person : 386 (1) 722 4383

productsafety@kansai-helios.si

1.4 Emergency telephone number

Emergency telephone number: 911

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Acute toxicity, Category 4 H332: Harmful if inhaled.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - single exposure, Category 3, Respiratory system

H335: May cause respiratory irritation.

Long-term (chronic) aquatic hazard, Cat-

egory 3

H412: Harmful to aquatic life with long lasting ef-

fects.

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

#### 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. P261 Avoid breathing mist or vapours. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immedi-

ately all contaminated clothing. Rinse skin with water.

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

Hexamethylene-di-isocyanate, polymer 2-butoxyethyl acetate Hydrocarbons, C9 aromatics

hexamethylene-di-isocyanate

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

## Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
Hexamethylene diisocyanate, oligo-	28182-81-2	Acute Tox. 4; H332	>= 50 - < 70
mers		Skin Sens. 1; H317	





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

2-butoxyethyl acetate	500-060-2 01-2119485796-17	STOT SE 3; H335 (Respiratory system) Acute Tox. 4; H302	>= 10 - < 20
	203-933-3 607-038-00-2 01-2119475112-47	Acute Tox. 4; H332 Acute Tox. 4; H312	7 .0 (20
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 10 - < 20
Hydrocarbons, C9 aromatics	- 918-668-5 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory sys- tem) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 2.5 - < 10
solvent naphtha (petroleum), light aromatic	64742-95-6 265-199-0 649-356-00-4 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory sys- tem) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 2.5 - < 10
hexamethylene diisocyanate	822-06-0 212-485-8 615-011-00-1 01-2119457571-37	Acute Tox. 4; H302 Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system)	< 0.1

### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.





Version **Revision Date:** SDS Number: Date of last issue: -

MAT000477749 Date of first issue: 28.11.2023 1.0 28.11.2023

JO/EN

If inhaled If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact If on skin, rinse well with water.

If on clothes, remove clothes.

In case of eye contact Flush eyes with water as a precaution.

> Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Risks May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** : Treat symptomatically.

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

ucts

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information Collect contaminated fire extinguishing water separately. This

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

For safety reasons in case of fire, cans should be stored sepa-

rately in closed containments.

Use a water spray to cool fully closed containers.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentra-

tions. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible ab-

sorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

## 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

used.

Advice on protection against

fire and explosion

Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : Wash hands before breaks and at the end of workday.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : For further information, refer to the product technical data

sheet.

Consult the technical guidelines for the use of this sub-

stance/mixture.

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-butoxyethyl ace- tate	112-07-2	TWA	20 ppm 133 mg/m3	2000/39/EC
		STEL	50 ppm 333 mg/m3	2000/39/EC
n-butyl acetate	123-86-4	STEL	150 ppm 723 mg/m3	2019/1831/E U
		TWA	50 ppm 241 mg/m3	2019/1831/E U

## **Derived No Effect Level (DNEL)**

### according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Hexamethylene-di- isocyanate, polymer	Workers	Inhalation	Long-term local ef- fects	0.5 mg/m3
	Workers	Inhalation	Long-term systemic effects	1 mg/m3

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023 JO/EN

2-butoxyethyl acetate Workers Inhalation Long-term systemic 333 mg/m3 effects Consumers Oral Long-term systemic 86 mg/kg effects bw/day 169 mg/kg Workers Dermal Long-term systemic effects bw/day Acute systemic ef-120 mg/kg Workers Dermal fects bw/day Long-term systemic 102 mg/kg Consumers Dermal bw/day effects Dermal Acute systemic ef-72 mg/kg Consumers bw/day fects Consumers Oral Acute systemic ef-36 ma/ka fects bw/day ethyl 3-Workers Inhalation Long-term systemic 610 mg/m3 ethoxypropionate effects Workers Long-term local ef-610 mg/m3 Inhalation fects 72.6 mg/m3 Consumers Inhalation Long-term systemic effects Consumers Inhalation Long-term local ef-72.6 mg/m3 fects Workers Long-term local ef-102 mg/cm2 Dermal fects Workers Dermal Long-term systemic 102 mg/kg bw/day effects 24.2 mg/kg Long-term systemic Consumers Dermal effects bw/day Consumers Oral Long-term systemic 1.2 mg/kg bw/day effects 600 mg/m3 n-butyl acetate Workers Inhalation Acute systemic effects 600 mg/m3 Workers Inhalation Acute local effects Workers Inhalation Long-term systemic 48 mg/m3 effects Workers Inhalation Long-term local ef-300 mg/m3 fects Acute systemic ef-300 mg/m3 Consumers Inhalation fects Consumers Inhalation Acute local effects 300 mg/m3 Consumers Long-term systemic 12 mg/m3 Inhalation effects Consumers Inhalation Long-term local ef-35.7 mg/m3 fects Dermal Long-term systemic 3.4 mg/kg Consumers effects bw/day 6 mg/kg Consumers Dermal Acute systemic efbw/day fects 2 mg/kg Consumers Oral Long-term systemic effects bw/day Consumers Oral Acute systemic ef-2 mg/kg bw/day fects Long-term systemic 7 mg/kg Workers Dermal





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

	Ī		effects	bw/day
	Workers	Dermal	Acute systemic ef-	11 mg/kg
	TT GINGIO	Domina.	fects	bw/day
Hydrocarbons, C9 aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Oral	Long-term systemic effects	150 mg/m3
	Consumers	Inhalation	Long-term exposure	32 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	11 mg/kg bw/day
hexamethylene-di- isocyanate	Workers	Inhalation	Long-term systemic effects	0.035 mg/m3
	Workers	Inhalation	Acute systemic ef- fects	0.07 mg/m3
	Workers	Inhalation	Long-term local ef- fects	0.035 mg/m3
	Workers	Inhalation	Acute local effects	0.07 mg/m3

# **Predicted No Effect Concentration (PNEC)**

# according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Hexamethylene-di-isocyanate, polymer	Soil	505 mg/kg dry weight (d.w.)
	Marine water	0.01 mg/l
	Fresh water	0.1 mg/l
	Marine sediment	253 mg/kg dry weight (d.w.)
	Fresh water sediment	2530 mg/kg dry weight (d.w.)
	Sewage treatment plant	100 mg/l
	Intermittent use/release	1 mg/l
2-butoxyethyl acetate	Soil	0.415 mg/kg dry weight (d.w.)
	Marine water	0.0304 mg/l
	Fresh water	0.304 mg/l
	Marine sediment	0.203 mg/kg dry weight (d.w.)
	Fresh water sediment	2.03 mg/kg dry





Version Rev

1.0

Revision Date: 28.11.2023

SDS Number: MAT000477749

Date of last issue: -

49 Date of first issue: 28.11.2023

JO/EN

		weight (d.w.)
	Sewage treatment plant	90 mg/l
	Intermittent use/release	0.56 mg/l
ethyl 3-ethoxypropionate	Soil	0.048 mg/kg dry
		weight (d.w.)
	Marine water	0.00609 mg/l
	Fresh water	0.0609 mg/l
	Marine sediment	0.0419 mg/kg dry
		weight (d.w.)
	Fresh water sediment	0.419 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	50 mg/l
	Intermittent use/release	0.609 mg/l
n-butyl acetate	Soil	0.0903 mg/kg dry
•		weight (d.w.)
	Marine water	0.018 mg/l
	Fresh water	0.18 mg/l
	Marine sediment	0.0981 mg/kg dry
		weight (d.w.)
	Fresh water sediment	0.981 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	35.6 mg/l
	Intermittent use/release	0.36 mg/l
hexamethylene-di-isocyanate	Soil	0.0026 mg/kg dry
	Marine water	weight (d.w.) 0.00774 mg/l
	Fresh water	0.00774 mg/l
	Marine sediment	0.001344 mg/kg
	Marine Sediment	dry weight (d.w.)
	Fresh water sediment	0.01334 mg/kg
	Fiesh water sediment	dry weight (d.w.)
	Sowage treatment plant	
	Sewage treatment plant	8.42 mg/l
	Intermittent use/release	0.774 mg/l

## 8.2 Exposure controls

Personal protective equipment

Eye/face protection : Equipment should conform to EN 166

Eye wash bottle with pure water Tightly fitting safety goggles

Hand protection

Gloves : | Viton® (> 0,6 mm; < 240 min); DIN EN374 |

PE laminate (> 0,1 mm; < 240 min); DIN EN374

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of

cuts, abrasion, and the contact time.





Version **Revision Date:** SDS Number: Date of last issue: -

28.11.2023 MAT000477749 Date of first issue: 28.11.2023 1.0

JO/EN

Skin and body protection Impervious clothing

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Use respiratory protection unless adequate local exhaust ven-Respiratory protection

> tilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type Organic vapour type (A)

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

**Appearance** liquid

Colour in accordance with the product description

Odour solvent-like

Odour Threshold No data available

Not applicable pΗ

-78.0 °C Melting point/freezing point

(calculation method (principal components, lowest value)) Boiling point/boiling range 126 °C (calculation method (principal components, lowest

value))

50 °C Flash point

Flammability (solid, gas) Static-accumulating flammable liquid., Combustible Solids

Upper explosion limit / Upper

flammability limit

10.1 %(V) (calculation method (principal components, highest

value))

Lower explosion limit / Lower

flammability limit

1.2 %(V) (calculation method (principal components, highest

value))

Relative vapour density No data available

No data available Relative density

Density 1.04 g/cm3

Solubility(ies)

immiscible, partly soluble Water solubility

Solubility in other solvents Description: miscible with most organic solvents





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

Partition coefficient: n-

octanol/water

: log Pow: 1.81 (calculation method (principal components,

highest value))

Auto-ignition temperature : 280 °C (calculation method (principal components, highest

value))

Decomposition temperature : No decomposition if stored and applied as directed.

Hazardous decomposition products formed under fire condi-

tions.

Viscosity

Viscosity, kinematic : > 20.5 mm2/s (40 °C)

Explosive properties : Not applicable

Oxidizing properties : Sustains combustion

9.2 Other information

No data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No decomposition if stored and applied as directed.

## 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Incompatible with strong acids and bases.

#### 10.6 Hazardous decomposition products

Adequate ventilation is required.

Heating can release vapours which can be ignited.

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

## **Acute toxicity**

Harmful if inhaled.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 15.35 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

## **Components:**

### Hexamethylene-di-isocyanate, polymer:

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.

2-butoxyethyl acetate:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after

single ingestion.

LD50 Oral (Rat): >= 2,400 mg/kg

Acute inhalation toxicity : LC50 (Rat): >= 50 mg/l

Exposure time: 2 h Test atmosphere: vapour

Acute dermal toxicity : Assessment: The component/mixture is moderately toxic after

single contact withskin.

LD50 (Rabbit): >= 1,500 mg/kg

n-butyl acetate:

Acute oral toxicity : LD50 Oral (Rat): >= 10,760 mg/kg

Acute dermal toxicity : LD50 (Rabbit): >= 5,000 mg/kg

Hydrocarbons, C9 aromatics:

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

hexamethylene-di-isocyanate:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after

single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is highly toxic after short

term inhalation.

Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Remarks : May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

**Product:** 

Remarks : Causes sensitisation.

**Components:** 

Hexamethylene-di-isocyanate, polymer:

Result : Probability or evidence of skin sensitisation in humans

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Germ cell mutagenicity- As- : Classified based on benzene content < 0.1% (Regulation (EC)

sessment 1272/2008, Annex VI, Part 3, Note P)

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

## Carcinogenicity

Not classified based on available information.

#### Components:

## Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Carcinogenicity - Assess- : Classified based on benzene content < 0.1% (Regulation (EC)

ment 1272/2008, Annex VI, Part 3, Note P)

## Reproductive toxicity

Not classified based on available information.

## STOT - single exposure

May cause respiratory irritation.

### **Components:**

# Hexamethylene-di-isocyanate, polymer:

Assessment : May cause respiratory irritation.

n-butyl acetate:

Assessment : May cause drowsiness or dizziness.

#### Hydrocarbons, C9 aromatics:

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

## Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

## STOT - repeated exposure

Not classified based on available information.

### **Aspiration toxicity**

Not classified based on available information.

### **Components:**

#### Hydrocarbons, C9 aromatics:

May be fatal if swallowed and enters airways.

# Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

May be fatal if swallowed and enters airways.

## **Further information**

#### **Product:**





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

Remarks : Solvents may degrease the skin.

## **SECTION 12: Ecological information**

# 12.1 Toxicity

**Components:** 

2-butoxyethyl acetate:

Toxicity to fish : LC50 (Fish): >= 31 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia (water flea)): >= 142.5 mg/l

Exposure time: 48 h

Toxicity to microorganisms : EC50 (Bacteria): >= 2,800 mg/l

n-butyl acetate:

Toxicity to algae/aquatic

plants

NOEC (Desmodesmus subspicatus (green algae)): > 200 mg/l

EC50 (Desmodesmus subspicatus (green algae)): >= 647.7

mg/l

Exposure time: 72 h

Toxicity to microorganisms : IC50 (Tetrahymena pyriformis): 356 mg/l

Exposure time: 40 h

Hydrocarbons, C9 aromatics:

Toxicity to fish : LC50 (Fish): >= 9.2 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): >= 3.2 mg/l

Exposure time: 48 h

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Toxicity to fish : LC50 (Fish): > 1 - 10 mg/l

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia (water flea)): > 1 - 10 mg/l

Toxicity to microorganisms : EC50 (Bacteria): > 1 - 10 mg/l

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

### 12.2 Persistence and degradability

**Components:** 

2-butoxyethyl acetate:

Biodegradability : Result: Biodegradable

n-butyl acetate:

Biodegradability : Result: Biodegradable

Biodegradation: 83 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Stability in water : Degradation half life: 78 d

pH: 8

Remarks: Hydrolyses slowly.

Photodegradation : Remarks: Decomposes rapidly in contact with light.

12.3 Bioaccumulative potential

**Components:** 

2-butoxyethyl acetate:

Partition coefficient: n-

octanol/water

log Pow: 1.51

n-butyl acetate:

Bioaccumulation : Bioconcentration factor (BCF): 15

Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

log Pow: 1.81

Hydrocarbons, C9 aromatics:

Partition coefficient: n-

octanol/water

log Pow: < 4

12.4 Mobility in soil

**Components:** 

Hydrocarbons, C9 aromatics:

Mobility : Medium: Air

Content: 92.9 %

Medium: Water Content: 3.5 %

Medium: Soil Content: 1.9 %





Version Revision Date: SDS Number:

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

: Medium: Sediment Content: 1.8 %

Distribution among environ: :

mental compartments

Koc: 1.71 - 14.70

Remarks: Mobile in soils

Remarks: The product is insoluble and floats on water.

Date of last issue: -

#### 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Other adverse effects

**Product:** 

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

### **SECTION 14: Transport information**

#### 14.1 UN number

**ADN** : UN 1263



# **MOBIHEL 2K HS HARDENER 4300**

Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

ADR : UN 1263
RID : UN 1263
IMDG : UN 1263
IATA : UN 1263

14.2 UN proper shipping name

ADN : PAINT
ADR : PAINT
RID : PAINT
IMDG : PAINT
IATA : Paint

14.3 Transport hazard class(es)

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

# 14.4 Packing group

ADN

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

**IMDG** 

Packing group : III
Labels : 3
EmS Code : F-E, <u>S-E</u>

IATA (Cargo)

Packing instruction (cargo : 366

aircraft)

Packing instruction (LQ) : Y344
Packing group : III

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passen: 355

ger aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : no

ADR

Environmentally hazardous : no

**RID** 

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

### **SECTION 15: Regulatory information**

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

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H226 : Flammable liquid and vapour.

H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.

H312 : Harmful in contact with skin.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H330 : Fatal if inhaled. H332 : Harmful if inhaled.

H334 : May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

# **MOBIHEL 2K HS HARDENER 4300**



Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

H335 : May cause respiratory irritation. H336 : May cause drowsiness or dizziness.

H411 : Toxic to aquatic life with long lasting effects.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard

Eye Irrit. : Eye irritation

Flam. Liq. : Flammable liquids

Resp. Sens. : Respiratory sensitisation

Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

2019/1831/EU : Europe. Commission Directive 2019/1831/EU establishing a

fifth list of indicative occupational exposure limit values

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit 2019/1831/EU / TWA : Limit Value - eight hours 2019/1831/EU / STEL : Short term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response: ELx - Loading rate associated with x% response: EmS - Emergencv Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative





Version Revision Date: SDS Number: Date of last issue: -

1.0 28.11.2023 MAT000477749 Date of first issue: 28.11.2023

JO/EN

#### **Further information**

### Classification of the mixture: Classification procedure:

Flam. Liq. 3	H226	Based on product data or assessment
Acute Tox. 4	H332	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

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