

1 Identification

- **Product identifier**
- **Trade name: Mipa EP-Primer-Surfacr**
- **Application of the substance / the mixture Filler**
- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

MIPA SE
Am Oberen Moos 1
D-84051 Essenbach
Tel.: +49(0)8703-922-0
Fax.: +49(0)8703-922-100
e-mail: sdb-registratur@mipa-paints.com
www.mipa-paints.com

Fleetwood Products Inc.
13 American Way Suite 15
USA - NJ 08884 Spotswood
Tel.: +1 7324169590
e.mail: fleet089@hotmail.com

- **Emergency telephone number:**

International: 011 49(0)700 24112112 (MIP)

US: +1 872 5888271 (MIP)

US Emergency Telephone Number (for transportation incidents only): 1-800-535-5053 (Infotrac)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 3

H226 Flammable liquid and vapor.



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word Warning**

- **Hazard-determining components of labeling:**

Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)

Ethylbenzene

Trade name: Mipa EP-Primer-Surfacer

(Contd. of page 1)

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)

Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Hazard statements

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 3

Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 3

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

25068-38-6	Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)	10-25%
1330-20-7	Xylene	≥10-<15%
107-98-2	1-methoxy-2-propanol	2.5-<10%
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)	≥2.5-<5%
78-93-3	Methyl ethyl ketone	2.5-<10%
78-83-1	Isobutanol	≥2.5-<3%
100-41-4	Ethylbenzene	<2.5%

(Contd. on page 3)

Trade name: Mipa EP-Primer-Surfacer

(Contd. of page 2)

162627-17-0	Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	≥0.1-<1%
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4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

25068-38-6	Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)	90 mg/m ³
13463-67-7	Titanium dioxide	30 mg/m ³
1330-20-7	Xylene	130 ppm

(Contd. on page 4)

Trade name: Mipa EP-Primer-Surfacers

		(Contd. of page 3)
107-98-2	1-methoxy-2-propanol	100 ppm
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)	90 mg/m ³
78-93-3	Methyl ethyl ketone	200 ppm
7779-90-0	Trizinc bis(orthophosphate)	12 mg/m ³
78-83-1	Isobutanol	150 ppm
100-41-4	Ethylbenzene	33 ppm
7784-30-7	Aluminium orthophosphate	14 mg/m ³
14808-60-7	Quartz (SiO ₂)	0.075 mg/m ³
112945-52-5	Silicon dioxide	18 mg/m ³
1314-13-2	zinc oxide	10 mg/m ³
108-65-6	2-Methoxy-1-methylethyl acetate	50 ppm
7727-43-7	Barium sulphate, natural	15 mg/m ³
123-86-4	n-Butyl acetate	5 ppm
1333-86-4	Carbon black	9 mg/m ³
112-07-2	2-Butoxyethyl acetate	15 ppm
34590-94-8	Dipropylene glycol monomethyl ether	150 ppm
540-97-6	Dodecamethylcyclohexasiloxane	150 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	30 ppm

PAC-2:

25068-38-6	Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)	990 mg/m ³
13463-67-7	Titanium dioxide	330 mg/m ³
1330-20-7	Xylene	920* ppm
107-98-2	1-methoxy-2-propanol	160 ppm
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)	990 mg/m ³
78-93-3	Methyl ethyl ketone	2700* ppm
7779-90-0	Trizinc bis(orthophosphate)	36 mg/m ³
78-83-1	Isobutanol	1,300 ppm
100-41-4	Ethylbenzene	1100* ppm
7784-30-7	Aluminium orthophosphate	200 mg/m ³
14808-60-7	Quartz (SiO ₂)	33 mg/m ³
112945-52-5	Silicon dioxide	100 mg/m ³
1314-13-2	zinc oxide	15 mg/m ³
108-65-6	2-Methoxy-1-methylethyl acetate	1,000 ppm
7727-43-7	Barium sulphate, natural	170 mg/m ³
123-86-4	n-Butyl acetate	200 ppm
1333-86-4	Carbon black	99 mg/m ³
112-07-2	2-Butoxyethyl acetate	35 ppm
34590-94-8	Dipropylene glycol monomethyl ether	1700* ppm
540-97-6	Dodecamethylcyclohexasiloxane	1,700 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	68 ppm

PAC-3:

25068-38-6	Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)	5,900 mg/m ³
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(Contd. on page 5)

Trade name: Mipa EP-Primer-Surfacer

		(Contd. of page 4)
13463-67-7	Titanium dioxide	2,000 mg/m ³
1330-20-7	Xylene	2500* ppm
107-98-2	1-methoxy-2-propanol	660 ppm
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)	5,900 mg/m ³
78-93-3	Methyl ethyl ketone	4000* ppm
7779-90-0	Trizinc bis(orthophosphate)	220 mg/m ³
78-83-1	Isobutanol	8000* ppm
100-41-4	Ethylbenzene	1800* ppm
7784-30-7	Aluminium orthophosphate	1,200 mg/m ³
14808-60-7	Quartz (SiO ₂)	200 mg/m ³
112945-52-5	Silicon dioxide	630 mg/m ³
1314-13-2	zinc oxide	2,500 mg/m ³
108-65-6	2-Methoxy-1-methylethyl acetate	5000* ppm
7727-43-7	Barium sulphate, natural	990 mg/m ³
123-86-4	n-Butyl acetate	3000* ppm
1333-86-4	Carbon black	590 mg/m ³
112-07-2	2-Butoxyethyl acetate	210 ppm
34590-94-8	Dipropylene glycol monomethyl ether	9900** ppm
540-97-6	Dodecamethylcyclohexasiloxane	9,900 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	130 ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class:** 3
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

(Contd. on page 6)

Trade name: Mipa EP-Primer-Surfacer

(Contd. of page 5)

1330-20-7 Xylene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 20 ppm BEI, A4

107-98-2 1-methoxy-2-propanol

REL	Short-term value: 540 mg/m ³ , 150 ppm Long-term value: 360 mg/m ³ , 100 ppm
TLV	Short-term value: 100 ppm Long-term value: 50 ppm A4

78-93-3 Methyl ethyl ketone

PEL	Long-term value: 590 mg/m ³ , 200 ppm
REL	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
TLV	Short-term value: 300 ppm Long-term value: 200 ppm BEI

78-83-1 Isobutanol

PEL	Long-term value: 300 mg/m ³ , 100 ppm
REL	Long-term value: 150 mg/m ³ , 50 ppm
TLV	Long-term value: 50 ppm

100-41-4 Ethylbenzene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 20 ppm OTO, BEI, A3

· Ingredients with biological limit values:

1330-20-7 Xylene

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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78-93-3 Methyl ethyl ketone

BEI	2 mg/L Medium: urine Time: end of shift Parameter: Methyl ethyl ketone (nonspecific)
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100-41-4 Ethylbenzene

BEI	0.15 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

(Contd. on page 7)

Trade name: Mipa EP-Primer-Surfacers

(Contd. of page 6)

Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

· **Breathing equipment:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Breakthrough time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid
Color: According to product specification
· **Odor:** Characteristic
· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 120.3 °C (248.5 °F)

· **Flash point:** 25 °C (77 °F) (DIN EN ISO 1523:2002)

· **Flammability (solid, gaseous):** Flammable.

(Contd. on page 8)

Trade name: Mipa EP-Primer-Surfacers

(Contd. of page 7)

· Ignition temperature:	270 °C (518 °F) (DIN 51794)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	7 Vol %
· Vapor pressure at 20 °C (68 °F):	12 hPa (9 mm Hg)
· Density at 20 °C (68 °F):	1.455 g/cm ³ (12.142 lbs/gal) (DIN EN ISO 2811-1)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C (68 °F):	210 s (DIN 53211/4)
· Solvent content:	
VOC content:	28.01 % 408 g/l / 3.4 lb/gal
Solids content (weight-%):	72.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- on the skin:** No irritant effect.
- on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 9)

Trade name: Mipa EP-Primer-Surfacer

(Contd. of page 8)

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

13463-67-7	Titanium dioxide	2B
1330-20-7	Xylene	3
14807-96-6	Talc	3
100-41-4	Ethylbenzene	2B
14808-60-7	Quartz (SiO ₂)	1

· **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** UN1263

· **UN proper shipping name**

· **DOT** Paint
· **ADR** UN1263 PAINT, ENVIRONMENTALLY HAZARDOUS

(Contd. on page 10)

Trade name: Mipa EP-Primer-Surfacers

(Contd. of page 9)

· **IMDG** PAINT (Bisphenolresins, Trizinc bis(orthophosphate)), MARINE POLLUTANT
 · **IATA** PAINT

· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids
 · **Label** 3

· **ADR**



· **Class** 3 (F1) Flammable liquids
 · **Label** 3

· **IMDG**



· **Class** 3 Flammable liquids
 · **Label** 3

· **IATA**



· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**

· **DOT, ADR, IMDG, IATA** III

· **Environmental hazards:** Product contains environmentally hazardous substances: Trizinc bis(orthophosphate)

· **Marine pollutant:** No
 Yes (DOT)
 Symbol (fish and tree)

· **Special marking (ADR):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids

· **Hazard identification number (Kemler code):** 30

· **EMS Number:** F-E, S-E

· **Stowage Category** A

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

(Contd. on page 11)

Trade name: Mipa EP-Primer-Surfacers

(Contd. of page 10)

· Transport/Additional information:

· DOT

· Remarks: Special marking with the symbol (fish and tree).

· ADR

· Limited quantities (LQ) 5L

· Remarks: ≤ 5 l: 2.2.3.1.5 ADR

· IMDG

· Limited quantities (LQ) 5L

· Remarks: ≤ 5 l: 2.2.3.1.5 IMDG

· UN "Model Regulation": UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

1330-20-7	Xylene
7779-90-0	Trizinc bis(orthophosphate)
100-41-4	Ethylbenzene
1314-13-2	zinc oxide
7727-43-7	Barium sulphate, natural
112-07-2	2-Butoxyethyl acetate

· Hazardous Air Pollutants

1330-20-7	Xylene
100-41-4	Ethylbenzene

· Proposition 65

· Chemicals known to cause cancer:

13463-67-7	Titanium dioxide
100-41-4	Ethylbenzene
14808-60-7	Quartz (SiO ₂)
1333-86-4	Carbon black

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

1330-20-7	Xylene	/
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(Contd. on page 12)

Trade name: Mipa EP-Primer-Surfacers

(Contd. of page 11)

78-93-3	Methyl ethyl ketone	I
7779-90-0	Trizinc bis(orthophosphate)	D, I, II
100-41-4	Ethylbenzene	D
1314-13-2	zinc oxide	D, I, II
7727-43-7	Barium sulphate, natural	D, CBD(inh), NL(oral)

· TLV (Threshold Limit Value)

13463-67-7	Titanium dioxide	A4	10-25%
1330-20-7	Xylene	A4	≥10-<15%
14807-96-6	Talc	A4	2.5-<10%
100-41-4	Ethylbenzene	A3	<2.5%
14808-60-7	Quartz (SiO ₂)	A2	<1%
1333-86-4	Carbon black	A4	<0.1%
112-07-2	2-Butoxyethyl acetate	A3	<0.1%

· NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7	Titanium dioxide
14808-60-7	Quartz (SiO ₂)
1333-86-4	Carbon black

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02 GHS07 GHS08

· Signal word Warning

· Hazard-determining components of labeling:

Bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)

Ethylbenzene

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)

Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

· Hazard statements

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

(Contd. on page 13)

Trade name: Mipa EP-Primer-Surfacer

(Contd. of page 12)

- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials:**

Class	Share in %
NK	25-50

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:**
- **Date of preparation / last revision 02/28/2023**
- **Abbreviations and acronyms:**
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 BEI: Biological Exposure Limit
 Flammable Liquids 3: Flammable liquids – Category 3
 Skin Irritation 2: Skin corrosion/irritation – Category 2
 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
 Sensitization - Skin 1: Skin sensitisation – Category 1
 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2
- *** Data compared to the previous version altered.**