

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 1 / 17

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

1.1 Product identifier

HENSOGRUND 1966 E

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

1.2.1 Relevant uses

Coating agent

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company Rudolf Hensel GmbH
Lauenburger Landstr. 11
21039 Börnsen / GERMANY
Phone +49 (0)40-72 10 62 10
Fax +49 (0)40-72 10 62 52
Homepage www.rudolf-hensel.de
E-mail info@rudolf-hensel.de

Address enquiries to

Technical information info@rudolf-hensel.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +49 (0)40-72 10 62 10 (7:00 - 17:00) 0172 4115390 (17:00 - 07:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Flam. Liq. 3: H226 Flammable liquid and vapour.
Skin Irrit. 2: H315 Causes skin irritation.
Eye Irrit. 2: H319 Causes serious eye irritation.
STOT SE 3: H335 May cause respiratory irritation.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 2 / 17

2.2 Label elements

Hazard pictograms



Signal word

WARNING

Contains:

Reaction mass of ethylbenzene and xylene

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours / spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P273 Avoid release to the environment.
P312 Call a POISON CENTER / doctor if you feel unwell.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling

Contains: 2-Butanone oxime, Fatty acids, C14-18 and C16-18-unsatd., maleated, Maleic anhydride, Cobalt bis(2-ethylhexanoate). EUH208 May produce an allergic reaction.

2004/42/CE

< 500 g/l II A i SB One-pack performance coatings (max. 500 g/l)

2.3 Other hazards

Human health dangers

If swallowed or in the event of vomiting, risk of product entering the lungs.

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.

Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 3 / 17

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
15 - < 25	Reaction mass of ethylbenzene and xylene EINECS/ELINCS: 905-588-0, Reg-No.: 01-2119488216-32-XXXX, 01-2119486136-34-XXXX GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H312 H332 - Asp. Tox. 1: H304 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - STOT SE 3: H335 - STOT RE 2: H373
1 - < 10	Hydrocarbons, C9, aromatics CAS: 128601-23-0, EINECS/ELINCS: 918-668-5, Reg-No.: 01-2119455851-35-XXXX GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H335 - Aquatic Chronic 2: H411 - Asp. Tox. 1: H304 - - STOT SE 3: H336
2,5 - <10	Trizinc bis(orthophosphate) CAS: 7779-90-0, EINECS/ELINCS: 231-944-3, EU-INDEX: 030-011-00-6, Reg-No.: 01-2119485044-40-XXXX GHS/CLP: Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M_acute = 1, M_chronic = 1
0,25 - < 2,5	Zinc oxide CAS: 1314-13-2, EINECS/ELINCS: 215-222-5, EU-INDEX: 030-013-00-7, Reg-No.: 01-2119463881-32-XXXX GHS/CLP: Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M_acute = 1, M_chronic = 1
< 2	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics EINECS/ELINCS: 918-481-9, Reg-No.: 01-2119457273-39-XXXX GHS/CLP: Asp. Tox. 1: H304
0,1 -<0,5	2-Butanone oxime CAS: 96-29-7, EINECS/ELINCS: 202-496-6, EU-INDEX: 616-014-00-0, Reg-No.: 01-2119539477-28-XXXX GHS/CLP: Carc. 2: H351 - Acute Tox. 4: H312 - Eye Dam. 1: H318 - Skin Sens. 1: H317
<1	Fatty acids, C14-18 and C16-18-unsatd., maleated CAS: 85711-46-2, EINECS/ELINCS: 288-306-2, Reg-No.: 01-2119976378-19-XXXX GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317
< 0,5	Bariumbis(2-ethylhexanoat) CAS: 2457-01-4, EINECS/ELINCS: 219-535-8, Reg-No.: 01-2119983179-22-XXXX GHS/CLP: Acute Tox. 4: H302 H332 - Eye Dam. 1: H318 - Repr. 2: H361d
<1	Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2, EINECS/ELINCS: 286-272-3, Reg-No.: 01-2119979093-30-XXXX GHS/CLP: Repr. 2: H361d - Eye Irrit. 2: H319 - Aquatic Chronic 3: H412
<0,1	Cobalt bis(2-ethylhexanoate) CAS: 136-52-7, EINECS/ELINCS: 205-250-6, Reg-No.: 01-2119524678-29-XXXX GHS/CLP: Repr. 1B: H360F - Aquatic Acute 1: H400 - Aquatic Chronic 3: H412 - Eye Irrit. 2: H319 - Skin Sens. 1A: H317, M_acute = 1
< 0,001	Maleic anhydride CAS: 108-31-6, EINECS/ELINCS: 203-571-6, EU-INDEX: 607-096-00-9, Reg-No.: 01-2119472428-31-XXXX GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Eye Dam. 1: H318 - Resp. Sens. 1: H334 - Skin Sens. 1: H317 - STOT RE 1: H372

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
 For full text of H-statements: see SECTION 16.

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 4 / 17

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
Inhalation	Remove person to fresh air and keep comfortable for breathing. In the event of symptoms seek medical treatment.
Skin contact	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Consult a doctor immediately. Do not induce vomiting. Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray jet.
Dry powder.
Carbon dioxide.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use breathing apparatus if exposed to vapours.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand).
Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

See SECTION 8+13

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 5 / 17

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide suitable vacuuming at the processing machines and in the processing area.
Provide good room ventilation even at ground level (vapours are heavier than air).

Vapours can form an explosive mixture with air.

Take precautionary measures against static discharges.

Keep away from all sources of ignition - Refrain from smoking.

Ignitable mixtures can be formed in the empty container.

Use explosion-proofed equipment/fittings and non-sparkling tools.

Do not eat, drink, smoke or take drugs at work.

Take off contaminated clothing and wash before reuse.

After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.

Keep only in original container.

Prevent penetration into the ground.

Do not store together with oxidizing agents.

Do not store together with food and animal food/diet.

Keep container tightly closed.

Keep container in a well-ventilated place.

Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 6 / 17

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Hydrocarbons, C9, aromatics
CAS: 128601-23-0, EINECS/ELINCS: 918-668-5, Reg-No.: 01-2119455851-35-XXXX
Long-term exposure: 100 mg/m ³
Maleic anhydride
CAS: 108-31-6, EINECS/ELINCS: 203-571-6, EU-INDEX: 607-096-00-9, Reg-No.: 01-2119472428-31-XXXX
Long-term exposure: 1 mg/m ³ , Sen
Short-term exposure (15-minute): 3 mg/m ³
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
EINECS/ELINCS: 918-481-9, Reg-No.: 01-2119457273-39-XXXX
Long-term exposure: 184 ppm, 1200 mg/m ³ , ExxonMobil
Xylene, mixture of isomers
CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
Long-term exposure: 50 ppm, 220 mg/m ³ , Sk, BMGV
Short-term exposure (15-minute): 100 ppm, 441 mg/m ³
Ethylbenzene
CAS: 100-41-4, EINECS/ELINCS: 202-849-4, EU-INDEX: 601-023-00-4, Reg-No.: 01-2119489370-35-XXXX
Long-term exposure: 100 ppm, 441 mg/m ³ , Sk
Short-term exposure (15-minute): 125 ppm, 552 mg/m ³
Mica
CAS: 12001-26-2, EINECS/ELINCS: 310-127-6
Long-term exposure: 10 mg/m ³ , total inhalable; respirable: TWA=0,8 mg/m ³
Talc (Mg3H2(SiO3)4)
CAS: 14807-96-6, EINECS/ELINCS: 238-877-9
Long-term exposure: 1 mg/m ³ , respirable dust
Barium sulfate
CAS: 7727-43-7, EINECS/ELINCS: 231-784-4
Long-term exposure: 10 mg/m ³ , inhabale dust; respirable dust: 4 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Xylene, mixture of isomers
CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
Eight hours: 50 ppm, 221 mg/m ³ , H
Short-term (15-minute): 100 ppm, 442 mg/m ³
Ethylbenzene
CAS: 100-41-4, EINECS/ELINCS: 202-849-4, EU-INDEX: 601-023-00-4, Reg-No.: 01-2119489370-35-XXXX
Eight hours: 100 ppm, 442 mg/m ³ , H
Short-term (15-minute): 200 ppm, 884 mg/m ³

DNEL

Substance
Bariumbis(2-ethylhexanoat), CAS: 2457-01-4
Industrial, dermal, Long-term - systemic effects: 7,25 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 20,49 mg/m ³ .



Rudolf Hensel GmbH
 21039 Börnsen

general population, oral, Long-term - systemic effects: 3,62 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 3,62 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 6,06 mg/m ³ .
Hydrocarbons, C9, aromatics, CAS: 128601-23-0
Industrial, inhalative, Long-term - systemic effects: 150 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 25 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 11 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 32 mg/m ³ .
general population, dermal, Long-term - systemic effects: 11 mg/kg bw/day.
2-Butanone oxime, CAS: 96-29-7
Industrial, inhalative, Long-term - local effects: 3,33 mg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 9 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 1,3 mg/kg bw/day.
Industrial, dermal, Acute - local effects: 2,5 mg/kg bw/day.
general population, dermal, Acute - systemic effects: 1,5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 0,78 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 2,7 mg/m ³ .
general population, inhalative, Long-term - local effects: 2 mg/m ³ .
Zinc oxide, CAS: 1314-13-2
Industrial, dermal, Long-term - systemic effects: 83 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 5 mg/m ³ .
general population, inhalative, Long-term - systemic effects: 2,5 mg/m ³ .
general population, oral, Long-term - systemic effects: 0,83 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 83 mg/kg bw/day.
Reaction mass of ethylbenzene and xylene
Industrial, inhalative (vapor), Acute - local effects: 442 mg/m ³ .
Industrial, inhalative (vapor), Long-term - local effects: 221 mg/m ³ .
Industrial, inhalative (vapor), Acute - systemic effects: 442 mg/m ³ .
Industrial, inhalative (vapor), Long-term - systemic effects: 221 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 212 mg/kg bw/day.
general population, inhalative (vapor), Long-term - local effects: 65,3 mg/m ³ .
general population, oral, Long-term - systemic effects: 12,5 mg/kg bw/day.
general population, inhalative (vapor), Acute - local effects: 260 mg/m ³ .
general population, inhalative (vapor), Acute - systemic effects: 260 mg/m ³ .
general population, inhalative (vapor), Long-term - systemic effects: 65,3 mg/m ³ .
general population, dermal, Acute - local effects: 125 mg/kg bw/day.
Hexanoic acid, 2-ethyl-, zinc salt, basic, CAS: 85203-81-2
Industrial, inhalative, Long-term - systemic effects: 20.83 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 6,41 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 3,21 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 3,21 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 10,42 mg/m ³ .
Cobalt bis(2-ethylhexanoate), CAS: 136-52-7
Industrial, inhalative, Long-term - local effects: 0,2351 mg/m ³ .
general population, inhalative, Long-term - local effects: 0,037 mg/m ³ .
general population, oral, Long-term - systemic effects: 175 µg/kg bw/day.
Maleic anhydride, CAS: 108-31-6
Industrial, inhalative, Long-term - local effects: 320 µg/m ³ .
Industrial, inhalative, Acute - systemic effects: 800 µg/m ³ .
Industrial, dermal, Acute - systemic effects: 200 µg/kg bw/day.



Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 8 / 17

Industrial, dermal, Long-term - systemic effects: 200 µg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 190 µg/m³.
general population, inhalative, Long-term - systemic effects: 50 µg/m³.
general population, inhalative, Long-term - local effects: 80 µg/m³.
general population, dermal, Long-term - systemic effects: 100 µg/kg bw/day.
general population, oral, Acute - systemic effects: 100 µg/kg bw/day.
general population, oral, Long-term - systemic effects: 60 µg/kg bw/day.
general population, dermal, Acute - systemic effects: 100 µg/kg bw/day.
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
Industrial, dermal, Long-term - systemic effects: 3 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 1,5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 1,5 mg/kg bw/day.
Trizinc bis(orthophosphate), CAS: 7779-90-0
Industrial, dermal, Long-term - systemic effects: 83 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 5 mg/m³.
general population, inhalative, Long-term - systemic effects: 2,5 mg/m³.
general population, oral, Long-term - systemic effects: 0,83 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 83 mg/kg bw/day.

PNEC

Substance
2-Butanone oxime, CAS: 96-29-7
freshwater, 0,256 mg/L.
sewage treatment plants (STP), 177 mg/L.
Zinc oxide, CAS: 1314-13-2
seawater, 6,1 µg/l.
sewage treatment plants (STP), 100 µg/l.
sediment (freshwater), 117,8 mg/kg sediment dw.
sediment (seawater), 56,5 mg/kg sediment dw.
soil, 35,6 mg/kg soil dw.
freshwater, 20,6 µg/l.
Reaction mass of ethylbenzene and xylene
soil, 2,31 mg/kg soil dw.
freshwater, 0,327 mg/L.
seawater, 0,327 mg/L.
sewage treatment plants (STP), 6,58 mg/L.
sediment (seawater), 12,46 mg/kg sediment dw.
sediment (freshwater), 12,46 mg/kg sediment dw.
Hexanoic acid, 2-ethyl-, zinc salt, basic, CAS: 85203-81-2
seawater, 0,036 mg/L.
freshwater, 0,36 mg/L.
sewage treatment plants (STP), 71,7 mg/L.
soil, 1,06 mg/kg.
sediment (seawater), 0,637 mg/kg sediment dw.
sediment (seawater), 6,37 mg/kg sediment dw.
Cobalt bis(2-ethylhexanoate), CAS: 136-52-7
sediment (freshwater), 53,8 mg/kg sediment dw.
seawater, 2,36 µg/L.
sediment (seawater), 69,8 mg/kg sediment dw.
sewage treatment plants (STP), 0,37 mg/l.
soil, 10,9 mg/kg.

Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 9 / 17

freshwater, 0,62 µg/L.
Maleic anhydride, CAS: 108-31-6
freshwater, 75 - 100 µg/L.
soil, 10 - 41,5 µg/kg soil dw.
seawater, 7,5 - 10 µg/L.
sewage treatment plants (STP), 4,46 - 44,6 mg/L.
sediment (freshwater), 60 - 334 µg/kg sediment dw.
sediment (seawater), 6 - 33,4 µg/kg sediment dw.
oral (food), 6,67 mg/kg food.
Trizinc bis(orthophosphate), CAS: 7779-90-0
sediment (freshwater), 117,8 mg/kg.
freshwater, 20,6 µg/L.
sewage treatment plants (STP), 100 µg/L.
sediment (seawater), 56,5 mg/kg.
soil, 35,6 mg/kg.
seawater, 6,1 µg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	For short-term contact: 0,4mm Butyl rubber, >480 min (EN 374-1/-2/-3). 0,4mm Nitrile rubber, >480 min (EN 374-1/-2/-3). In full contact: 0,4mm Viton, >120 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact during pregnancy/ while nursing.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 10 / 17

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	various
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 130
Flash point [°C]	30
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	ca. 0,6 Vol.%
Upper explosion limit	ca. 8,0 Vol.%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	1,40 (20 °C / 68,0 °F)
Bulk density [kg/m ³]	not applicable
Solubility in water	immiscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	60-80 s ISO 2431-1993 6 mm (20°C)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.
Reactions with oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 11 / 17

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, inhalation (vapour), > 20 mg/l 4h.
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.
Substance
Hydrocarbons, C9, aromatics, CAS: 128601-23-0
LD50, oral, Rat: 3592 mg/kg (OECD 401).
LD50, dermal, Rabbit: > 3160 mg/kg (OECD 402).
2-Butanone oxime, CAS: 96-29-7
LD50, dermal, Rabbit: 920-1840 mg/kg.
LD50, oral, Rat: 2300-3700 mg/kg.
Zinc oxide, CAS: 1314-13-2
LD50, oral, Rat: > 15000 mg/kg (OECD 401).
LC50, inhalative, Rat: > 5,7 mg/l (4h).
Reaction mass of ethylbenzene and xylene
LD50, dermal, Rabbit: 12126 mg/kg.
LD50, oral, Rat: 3523 - 4000 mg/kg.
LC50, inhalation (vapour), Rat: 6350 - 6700 ppm 4h.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
LD50, dermal, Rabbit: > 5000 mg/kg bw (OECD 402).
LD50, oral, Rat: > 5000 mg/kg bw (OECD 401).
LC50, inhalative, Rat: > 4951 mg/m ³ (4 h) (OECD 403).
Cobalt bis(2-ethylhexanoate), CAS: 136-52-7
LD50, dermal, Rabbit: > 5000 mg/kg.
LD50, oral, Rat: 3129 mg/kg.
Maleic anhydride, CAS: 108-31-6
LD50, dermal, Rabbit: 2 620 mg/kg bw.
LD50, oral, Rat: 1 090 mg/kg bw.
LC50, inhalative, Rat: 4,35 mg/m ³ (1 h).
Trizinc bis(orthophosphate), CAS: 7779-90-0
LD50, oral, Rat: > 5000 mg/kg.
LC50, inhalativ (dust), Rat: > 5,7 mg/L.

Serious eye damage/irritation

Irritant
 Based on the available information, the classification criteria are fulfilled.
 Toxicological data of complete product are not available.
 Calculation method

Skin corrosion/irritation

Irritant
 Based on the available information, the classification criteria are fulfilled.
 Toxicological data of complete product are not available.
 Calculation method

Respiratory or skin sensitisation

Based on the available information, the classification criteria are not fulfilled.
 Toxicological data of complete product are not available.

Specific target organ toxicity — single exposure

May cause respiratory irritation.
 Based on the available information, the classification criteria are fulfilled.
 Toxicological data of complete product are not available.
 Calculation method

Specific target organ toxicity — repeated exposure

May cause damage to organs through prolonged or repeated exposure.
 Based on the available information, the classification criteria are fulfilled.

Rudolf Hensel GmbH
 21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 12 / 17

	Toxicological data of complete product are not available. Calculation method
Mutagenicity	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Hydrocarbons, C9, aromatics, CAS: 128601-23-0
EL50, (48h), Daphnia magna: 3,2 mg/l (OECD 202).
EL50, (72h), Pseudokirchneriella subcapitata: 2,6 - 2,9 mg/l (Lit.).
LL50, (96h), Oncorhynchus mykiss: 9,2 mg/l (Lit.).
Zinc oxide, CAS: 1314-13-2
EC50, (72h), Selenastrum capricornutum: 170 µg/l.
Reaction mass of ethylbenzene and xylene
LC50, (24h), Daphnia magna: 1 mg/l OECD 202.
LC50, (96h), Oncorhynchus mykiss: 2,6 mg/l OECD 203.
EC50, (72h), Selenastrum capricornutum: 2,2 mg/l OECD 201.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
EL0, (48h), Daphnia magna: 1000 mg/l (Lit.).
EL0, (72h), Pseudokirchneriella subcapitata: 1000 mg/l (Lit.).
LL0, (96h), Oncorhynchus mykiss: 1000 mg/l (Lit.).
Cobalt bis(2-ethylhexanoate), CAS: 136-52-7
LC50, (96h), Pimephales promelas: 48 mg/l.
IC50, (72h), Algae: 0,528 mg/l.
NOEC, Pimephales promelas: 0,21 mg/l (OECS, 34d).
Maleic anhydride, CAS: 108-31-6
LC50, (96h), fish: 75 mg/L.
EC50, (72h), Algae: 74,32 - 150 mg/L.
EC50, (48h), Invertebrates: 42,81 - 330 mg/L.
Trizinc bis(orthophosphate), CAS: 7779-90-0
EC50, (48h), Ceriodaphnia dubia: 2,44 mg/L.
ErC50, (72h), Selenastrum capricornutum: 0,8 mg/L.

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 13 / 17

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 080111*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*
150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID 1263

Inland navigation (ADN) 1263

Marine transport in accordance with IMDG 1263

Air transport in accordance with IATA 1263

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 14 / 17

14.2 UN proper shipping name

Transport by land according to ADR/RID

Paint

- Classification Code

F1

- Label



- ADR LQ

5 I

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (D/E)

Inland navigation (ADN)

Paint

- Classification Code

F1

- Label



Marine transport in accordance with IMDG

Paint (trizinc bis(orthophosphate))

- EMS

F-E, S-E

- Label



- IMDG LQ

5 I

Air transport in accordance with IATA Paint

- Label



14.3 Transport hazard class(es)

Transport by land according to ADR/RID

3

Inland navigation (ADN)

3

Marine transport in accordance with IMDG

3

Air transport in accordance with IATA 3

14.4 Packing group

Transport by land according to ADR/RID

III

Inland navigation (ADN)

III

Marine transport in accordance with IMDG

III

Air transport in accordance with IATA III

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 15 / 17

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	< 500 g/l

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H302+H332 Harmful if swallowed or if inhaled.
H360F May damage fertility.
H412 Harmful to aquatic life with long lasting effects.
H361d Suspected of damaging the unborn child.
H312 Harmful in contact with skin.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H312+H332 Harmful in contact with skin or if inhaled.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
H335 May cause respiratory irritation.
H226 Flammable liquid and vapour.

Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 16 / 17

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV@/TWA = Threshold limit value – time-weighted average
TLV@STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 3: H226 Flammable liquid and vapour. (On basis of test data)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)

Modified position

SECTION 3 been added: Reaction mass of ethylbenzene and xylene
SECTION 3 been added: Bariumbis(2-ethylhexanoat)
SECTION 3 been added: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
SECTION 3 been added: Maleic anhydride
SECTION 5 been added: Risk of formation of toxic pyrolysis products.
SECTION 8 been added: Avoid contact during pregnancy/ while nursing.
SECTION 8 been added: In full contact:
SECTION 8 been added: Nitrile rubber, >480 min (EN 374-1/-2/-3).
SECTION 8 been added: Butyl rubber, >480 min (EN 374-1/-2/-3).
SECTION 8 been added: For short-term contact:
SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.
SECTION 8 deleted: Respiratory protection mask in the event of high concentrations.



Rudolf Hensel GmbH
21039 Börnsen

Date printed 23.04.2020, Revision 23.04.2020

Version 04. Supersedes version: 03

Page 17 / 17



Copyright: Chemiebüro®

