Rudolf Hensel GmbH

21039 Börnsen



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SECTION 1: Identificat	ion of the substance/mixture and of the	company/undertaking	
1.1 Product identifier			
	HENSOTHERM® 31	0 KS rapid	
1.2 Relevant identifie	d uses of the substance or mixture and	d uses advised against	
1.2.1 Relevant uses			
	Fire retardant coating		
1.2.2 Uses advised aga	linst		
	None known.		
1.3 Details of the sup	plier of the safety data sheet		
Company	Rudolf Hensel GmbH Lauenburger Landstr. 11 21039 Börnsen / GERMAI Phone +49 (0)40-72 10 62 Fax +49 (0)40-72 10 62 52 Homepage www.rudolf-he E-mail info@rudolf-hensel	2 10 2 nsel.de	
Address enquirie	s to		
Technical information	on info@rudolf-hensel.de		
Safety Data Sheet	sdb@chemiebuero.de		
1.4 Emergency teleph	none number		
Company	+49 (0)40-72 10 62 10 (7:0	00 - 17:00) 0172 4115390 (17:00 - 07:00)	
SECTION 2: Hazards ic	lentification		

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Skin Irrit. 2: H315 Causes skin irritation.
Skin Sens. 1: H317 May cause an allergic skin reaction.
STOT SE 3: H336 May cause drowsiness or dizziness.
Repr. 2: H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.



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2.2 Label elements

	Hazard pictograms	
	Signal word	DANGER
	Contains:	Toluene
		Maleic anhydride
		Melamine
		Fatty acids, C14-18 and C16-18-unsatd., maleated
	Hazard statements	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.
	Precautionary statements	 P201 Obtain special instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapours / spray. P233 Keep container tightly closed. P280 Wear protective gloves / protective clothing / eye protection / face protection. P308+P313 IF exposed or concerned: Get medical advice / attention. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with local/national regulation.
	2004/42/CE	< 500 g/l II A i SB One-pack performance coatings (max. 500 g/l)
3	Other hazards	
	Human health dangers	Contains no ingredients with endocrine-disrupting properties.
	Environmental hazards	Does not contain any PBT or vPvB substances.
	Other hazards	Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

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3.2 Mixtures

The product is a mixture.

Range [%]	Substance
20 - 30	Toluene
	CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Repr. 2: H361d - Asp. Tox. 1: H304 - STOT RE 2: H373 - Skin Irrit. 2: H315 - STOT SE 3: H336 - Aquatic Chronic 3: H412
3 - < 10	Melamine
	CAS: 108-78-1, EINECS/ELINCS: 203-615-4, Reg-No.: 01-2119485947-16-XXXX
	GHS/CLP: Repr. 2: H361f
<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. 1B: H317 - Eye Irrit. 2: H319
<0,001 - < 0,002	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 - Skin Sens. 1A: H317 - Resp. Sens. 1: H334 - STOT RE 1: H372 - EUH071
	SCL [%]: >=0,001: Skin Sens. 1A: H317

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.

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		
		Nausea vomiting	

- Nausea, vomiting. Dizziness
 - Drowsiness Headache Irritant effects Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. If swallowed or in the event of vomiting, risk of product entering the lungs. Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray jet. Carbon dioxide. Alcohol-resistant foam. Dry powder.
Extinguishing media that must not be used	Full water jet

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5.2	Special hazards arising from the	e substance or mixture
		Risk of formation of toxic pyrolysis products.
	Advice for firefighters	
5.3	Advice for firefighters	Do not inhale explosion and/or combustion gases.
		Use self-contained breathing apparatus.
		Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
SEC	CTION 6: Accidental release meas	ures
6.1	Personal precautions, protective	e equipment and emergency procedures
		Keep away from all sources of ignition. Ensure adequate ventilation. Use personal protective equipment (protective gloves, safety glasses, protective clothing). Use breathing apparatus if exposed to vapours.
6.2	Environmental precautions	
	·	Do not discharge into the drains/surface waters/groundwater.
6.3	Methods and material for contai	ment and cleaning up
5.5	methous and material for contai	Take up with absorbent material (e.g. sand).
		Dispose of absorbed material in accordance within the regulations.
6.4	Reference to other sections	
		See SECTION 8+13
SEC	CTION 7: Handling and storage	
7.1	Precautions for safe handling	
	Trecautions for sale handling	Use only in well-ventilated areas.
		Provide suitable vacuuming at the processing area.
		Keep away from all sources of ignition - Refrain from smoking.
		Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air.
		Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment.
		Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air.
		Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools.
		Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container.
7.2	Conditions for safe storage, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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. Iuding any incompatibilities Provide solvent-resistant and impermeable floor. Keep only in original container.
7.2	Conditions for safe storage, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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. Iuding any incompatibilities Provide solvent-resistant and impermeable floor. Keep only in original container. Prevent penetration into the ground.
7.2	Conditions for safe storage, inc	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges. Vapours can form an explosive mixture with air. Ground/bond container and receiving equipment. Use explosion-proofed equipment/fittings and non-sparkling tools. Ignitable mixtures can be formed in the empty container. 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. Iuding 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. Keep container tightly closed. Keep container in a well-ventilated place.

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Toluene
CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
Long-term exposure: 50 ppm, 191 mg/m ³ , Sk
Short-term exposure (15-minute): 100 ppm, 384 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/m³, Sen
Short-term exposure (15-minute): 3 mg/m ³
Titanium dioxide
CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, Reg-No.: 01-2119489379-17-XXXX
Long-term exposure: 4 mg/m ³ , respirable; total inhalable: TWA=10 mg/m ³
Pentaerythritol
CAS: 115-77-5, EINECS/ELINCS: 204-104-9, Reg-No.: 01-2119473985-20-XXXX
Long-term exposure: 10 mg/m³, inhalable dust, respirable dust: TWA=4 mg/m³
Short-term exposure (15-minute): 20 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Toluene
CAS: 108-88-3, EINECS/ELINCS: 203-625-9, EU-INDEX: 601-021-00-3, Reg-No.: 01-2119471310-51-XXXX
Eight hours: 50 ppm, 192 mg/m ³ , H
Short-term (15-minute): 100 ppm, 384 mg/m ³

DNEL

Substance
Melamine, CAS: 108-78-1
Industrial, dermal, Long-term - systemic effects, 11,8 mg/kg
Industrial, inhalative, Long-term - systemic effects, 8,3 mg/m ³
Industrial, inhalative, Acute - systemic effects, 82,3 mg/m ³
Industrial, dermal, Acute - systemic effects, 117 mg/kg
general population, oral, Long-term - systemic effects, 0,42 mg/kg
general population, dermal, Long-term - systemic effects, 4,2 mg/kg
general population, inhalative, Long-term - systemic effects, 1,5 mg/m ³
Toluene, CAS: 108-88-3
Industrial, dermal, Long-term - systemic effects, 384 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 192 mg/m ³
Industrial, inhalative, Long-term - local effects, 192 mg/m ³
Industrial, inhalative, Acute - systemic effects, 384 mg/m ³
Industrial, inhalative, Acute - local effects, 384 mg/m ³
general population, dermal, Long-term - systemic effects, 226 mg/kg bw/day
general population, inhalative, Acute - systemic effects, 226 mg/m ³
general population, inhalative, Long-term - local effects, 56,5 mg/m ³



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	general population, inhalative, Acute - local effects, 226 mg/m ³		
	general population, inhalative, Long-term - systemic effects, 56,5 mg/	m ³	
	Maleic anhydride, CAS: 108-31-6		
	Industrial, inhalative, Long-term - systemic effects, 81 µg/m ³		
	Industrial, inhalative, Acute - local effects, 200 µg/m ³		
	Industrial, inhalative, Long-term - local effects, 81 µg/m ³		
	Industrial, inhalative, Acute - systemic effects, 200 µg/m ³		
	Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2		
	Industrial, dermal, Long-term - systemic effects, 3,33 mg/kg bw/day		
	general population, oral, Long-term - systemic effects, 1,67 mg/kg bw	/day	
	general population, dermal, Long-term - systemic effects, 1,67 mg/kg	bw/day	
PNEC			
	Substance		
	Melamine, CAS: 108-78-1		
	sewage treatment plants (STP), 200 mg/L		
	oral (food), 22 mg/kg		
	soil, 1,6 mg/kg		
	sediment (seawater), 0,55 mg/kg		
	sediment (freshwater), 5,5 mg/kg		
	seawater, 0,051 mg/L		
	freshwater, 0,51 mg/L		
	Toluene, CAS: 108-88-3		
	seawater, 0,68 mg/L		
	sewage treatment plants (STP), 13,61 mg/L		
	sediment (freshwater), 16,39 mg/kg		
	freshwater, 0,68 mg/L		
	sediment (seawater), 16,39 mg/kg		
	soil, 2,89 mg/kg		
	Maleic anhydride, CAS: 108-31-6		
	sediment (seawater), 0,03 mg/kg sediment dw		
	freshwater, 0,038 mg/L		
	seawater, 0,004 mg/L		
	sediment (freshwater), 0,296 mg/kg sediment dw		
	soil, 0,037 mg/kg soil dw		
	sewage treatment plants (STP), 44,6 mg/L		
	Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2		
	sewage treatment plants (STP), 100 mg/L		

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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	Tightly fitting goggles. (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, >480 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 breathe vapour/spray. 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. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin. 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	none
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

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SECTION 9: Phys	ical and chemical properties
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9.1 Information on basic physical and chemical properties

	Physical state	liquid
	Color	white
	Odor	characteristic
	Odour threshold	not determined
	pH-value	not applicable
	pH-value [1%]	not applicable
	Boiling point [°C]	> 100
	Flash point [°C]	4
	Flammability (solid, gas) [°C]	not applicable
	Lower explosion limit	1,2 Vol.%
	Upper explosion limit	7,1 Vol.%
	Oxidising properties	no
	Vapour pressure/gas pressure [kPa]	ca. 3,5 (20°C)
	Density [g/cm³]	1,25 - 1,35 (20 °C / 68,0 °F)
	Relative density	not determined
	Bulk density [kg/m³]	not applicable
	Solubility in water	virtually insoluble
	Solubility other solvents	not applicable
	Partition coefficient [n-octanol/water]	not determined
	Kinematic viscosity	> 32s - <= 44s (6 mm)
	Relative vapour density	not determined
	Evaporation speed	not determined
	Melting point [°C]	not determined
	Auto-ignition temperature	not applicable
	Decomposition temperature [°C]	not determined
	Particle characteristics	not applicable
,	Other information	

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents. Formation of explosive gas/air mixtures.

10.4 Conditions to avoid

Strong heating. See SECTION 7.2.

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10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Product ATE-mix, oral, > 2000 mg/kg

Substance
Melamine, CAS: 108-78-1
LD50, oral, Rat (male), 3161 mg/kg
LD50, oral, Rat (female), 3828 mg/kg
Toluene, CAS: 108-88-3
LD50, oral, Rat, 5580 mg/kg =ECD 401
Maleic anhydride, CAS: 108-31-6
LD50, oral, Rat, 1090 mg/kg bw
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
LD50, oral, > 2000 mg/kg

Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg

Substance
Melamine, CAS: 108-78-1
LD50, dermal, Rat, > 2000 mg/kg
Toluene, CAS: 108-88-3
LD50, dermal, Rabbit, > 12000 mg/kg (IUCLID)
Maleic anhydride, CAS: 108-31-6
LD50, dermal, Rabbit, 2620 mg/kg bw
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
LD50, dermal, > 2000 mg/kg

Acute inhalational toxicity

Product	
ATE-mix, inhalation (vapour), > 20 mg/L 4h	

Substance	
Melamine, CAS: 108-78-1	
LC50, inhalative, Rat, 5,19 mg/l, OECD 403, 4h	
Toluene, CAS: 108-88-3	
LC50, inhalative, Rat, 28,1 mg/l, 4h (Lit.)	

Serious eye damage/irritation

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.

 Substance

 Toluene, CAS: 108-88-3

 Eye, The effects observed are not sufficient for classification.

 Maleic anhydride, CAS: 108-31-6

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Eye, Causes serious eye damage.	
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2	
Eye, irritant	

Skin corrosion/irritation

Irritant

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

Melamine, CAS: 108-78-1		
Rabbit, OECD 404, non-irritating		
Toluene, CAS: 108-88-3		
dermal, irritant		
Maleic anhydride, CAS: 108-31-	3	
dermal, corrosive		
Fatty acids, C14-18 and C16-18	unsatd., maleated, CAS: 85711-46-2	

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Classification was carried out based on substance-specific concentration limits. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available. Calculation method

Substance
Melamine, CAS: 108-78-1
Guinea pig, OECD 406, non-sensitizing
Toluene, CAS: 108-88-3
inhalative, non-sensitizing
dermal, non-sensitizing
Maleic anhydride, CAS: 108-31-6
inhalative, sensitising
dermal, sensitising
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
dermal, sensitising

Specific target organ toxicity – single exposure Vapours may cause drowsiness and dizziness. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available. Calculation method

Substance		
Toluene, CAS: 1	08-88-3	
inhalative, non-ir	ritating	
Maleic anhydride	e, CAS: 108-31-6	
inhalative, non-ir	ritating	

Specific target organ toxicity — repeated exposure

May cause damage to organs through prolonged or repeated exposure. Toxicological data of complete product are not available. Based on the available information, the classification criteria are fulfilled. Calculation method

Substance	
Toluene, CAS: 108-88-3	
NOAEL, oral, Rat, 625 mg/kg bw/day (subchronic), adverse effect observed	
LOAEC, inhalative, Rat, 2261 mg/m ³ (chronic), adverse effect observed	
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Maleic anhydride, CAS: 108-31-6 NOAEL, oral, Dog, 60 mg/kg bw/day (subchronic), no adverse effect observed NOAEC, inhalative, Rat, 3,3 mg/m3 (subchronic), adverse effect observed Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2 NOAEL, oral, Rat, no adverse effect observed

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.

Substance	
Maleic anhydride, CAS: 108-31-6	
in vivo, no adverse effect observed	
in vitro, no adverse effect observed	

Reproduction toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available. Calculation method

Substance	
Melamine, CAS: 108-78-1	
NOAEL, 833 mg/kg, OECD 443, positive	
Maleic anhydride, CAS: 108-31-6	
NOAEL, oral, Rat, 140 mg/kg bw/d (Effect on developmental toxicity), no adverse effect observed	
NOAEL, oral, Rat, 55 mg/kg bw/d (Effect on fertility), no adverse effect observed	

Carcinogenicity

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.

Substance	
Toluene, CAS: 108-88-3	
NOAEC, inhalative, Rat, 4522 mg/m³ (chronic), no adverse effect observed	
Maleic anhydride, CAS: 108-31-6	
NOAEL, oral, Rat, 100 mg/kg bw/day, no adverse effect observed	

	Achieve hozard	Pasad on the qualitable information, the algorithmation aritaria are not fulfilled
	Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
	General remarks	
		none
11.2	Information on other hazards	
	Endocrine disrupting properties	Contains no ingredients with endocrine-disrupting properties.

Other information

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SECTION 12: Ecological information

12.1 Toxicity

Substance
Melamine, CAS: 108-78-1
LC50, (96h), Oncorhynchus kisutch, > 3000 mg/L
EC50, (48h), Daphnia magna, 200 mg/L EPA OPP 72-2
NOEC, (21d), Daphnia magna, >= 11 mg/L OECD 211
ErC50, (96h), Pseudokirchneriella subcapitata, 325 mg/L PRO/FT Algae-AC090-6
Toluene, CAS: 108-88-3
LC50, (96h), Oncorhynchus mykiss, 5,8 mg/l (Lit.)
EC50, (48h), Ceriodaphnia dubia, 3,78 mg/l
NOEC, Ceriodaphnia dubia, 0,74 mg/l (7 d)
NOEC, Oncorhynchus kisutch, 1,39 mg/l (40 d)
Maleic anhydride, CAS: 108-31-6
LC50, (96h), fish, 75 mg/L
EC50, (72h), Algae, 74.35 - 150 mg/L
EC50, (48h), Invertebrates, 42,81 - 330 mg/L
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
EC50, (72h), Algae, 2,76 - 100 mg/L
EC50, (48h), Invertebrates, 5,3 - 100 mg/L
NOEC, (72h), Algae, 2,76 - 100 mg/L
NOEC, (48h), Invertebrates, 5,3 - 100 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.

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 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

None known.

Rudolf Hensel GmbH

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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)	080113*
	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* packaging containing residues of or contaminated by hazardous substances
SEC	TION 14: Transport information	
14.1	UN number or ID 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



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14.2	UN proper shipping name		
	Transport by land according to ADR/RID	Paint	
	- Classification Code	F1	
	- Label		
	- ADR LQ	51	
	- 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	
	- EMS	F-E, S-E	
	- Label		
	- IMDG LQ	51	
	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)	ш	
	Marine transport in accordance with IMDG	III	
	Air transport in accordance with IATA	. III	

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14.5	Environmental hazards		
14.5	Transport by land according to ADR/RID	no	
	Inland navigation (ADN)	no	
	Marine transport in accordance with IMDG	no	
	Air transport in accordance with IATA	N no	
14.6	Special precautions for user		
	Relevant information under SECTION 6	to 8.	
14 7	Maritime transport in bulk accord	ling to IMO instruments	

14.7 Maritime transport in bulk according to IMO instruments

not applicabl	e
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SECTION 15: Regulatory information	 	

15.1	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) 2020/878; (EU) 2016/131; (EU) 517/2014		
	TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)		
	NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.		
	- 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	5.2 Chemical safety assessment			
		not applicable		

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H361f Suspected of damaging fertility.
EUH071 Corrosive to the respiratory tract.
H372 Causes damage to organs through prolonged or repeated exposure.
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.
H412 Harmful to aquatic life with long lasting effects.
H336 May cause damage to organs through prolonged or repeated exposure.
H336 May cause damage to organs through prolonged or repeated exposure.
H336 May cause damage to organs through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H361d Suspected of damaging the unborn child.
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

H315 Causes skin irritation.



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40.0		ام مر م	
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

- IVIS = In vitro irritation score
- 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

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

10.0			
	Classification procedure	 Flam. Liq. 2: H225 Highly flammable liquid and vapour. (On basis of test data) Skin Irrit. 2: H315 Causes skin irritation. (Calculation method) Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method) STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method) Repr. 2: H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. (Calculation method) STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method) Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method) 	
	Modified position	SECTION 3 been added: Melamine SECTION 2 been added: Contains no ingredients with endocrine-disrupting properties. SECTION 2 been added: H317 May cause an allergic skin reaction. SECTION 2 been added: Skin Sens. 1 SECTION 2 been added: H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.	

SECTION 2 deleted: H361d Suspected of damaging the unborn child.

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