

# SISTEC – ST 051HD

## Antibacterial two pack industry coating

Product code	SIS ST 00 051HD	Revision	18.06.2014
MSDS Date	V1 – 18.06.2014	Issued by	OS

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

<b>Date of compilation</b>	18.06.2014
<b>1.1 Product identifier</b>	SISTEC ST 051HD, antibacterial two pack industry coating
<b>Article number</b>	SIS ST 00 051HD
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against:</b>	No further relevant information available.
<b>Application of the substance / the preparation:</b>	Paint
<b>1.3 Details of the supplier of the safety data sheet Manufacturer / Supplier:</b>	SISTEC Coatings GmbH Mausenstr. 6/1 71640 Ludwigsburg, Germany Tel: +49 (0)7141 990 5516 / Fax: +49(0)7141 990 5522
<b>E-mail address of the competent person responsible for the Safety Data Sheet::</b>	E-mail: <a href="mailto:info@sistec-coatings.de">info@sistec-coatings.de</a> Labor
<b>1.4 Emergency telephone number</b>	+49 (0)30 - 45 05 35 55

### SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**  
Classification according to Regulation (EC)  
No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Classification according to Directive  
67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.



Xi; Irritant

R38: Irritating to skin.

**Classification system:**

R10: Flammable.

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.



GHS 02      GHS 07

**Signal word:**

Warning

**Hazard statements:**

H226 Flammable liquid and vapour.  
H315 Causes skin irritation.

**Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P243 Take precautionary measures against static discharge.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P362 Take off contaminated clothing and wash before reuse.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

**PBT:**

Not applicable

**vPvB:**

Not applicable





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




**3.2 Chemical characterization:**

Mixtures

**Description:**

Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9	Xylene, mixture of isomers  Xn R20/21;  Xi R38 R10 -----  Flam. Liq. 3, H226;  Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	20-<25 %
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1	n-Butyl acetate R10-66-67 -----	10-15%

	 Flam. Liq. 3, H226;  H336 H373, H374, H375, H376, H377, H378, H379, H410, H411, H412, H413, H414, H415, H416, H417, H418, H419, H420, H421, H422, H423, H424, H425, H426, H427, H428, H429, H430, H431, H432, H433, H434, H435, H436, H437, H438, H439, H440, H441, H442, H443, H444, H445, H446, H447, H448, H449, H450, H451, H452, H453, H454, H455, H456, H457, H458, H459, H460, H461, H462, H463, H464, H465, H466, H467, H468, H469, H470, H471, H472, H473, H474, H475, H476, H477, H478, H479, H480, H481, H482, H483, H484, H485, H486, H487, H488, H489, H490, H491, H492, H493, H494, H495, H496, H497, H498, H499, H500, H501, H502, H503, H504, H505, H506, H507, H508, H509, H510, H511, H512, H513, H514, H515, H516, H517, H518, H519, H520, H521, H522, H523, H524, H525, H526, H527, H528, H529, H530, H531, H532, H533, H534, H535, H536, H537, H538, H539, H540, H541, H542, H543, H544, H545, H546, H547, H548, H549, H550, H551, H552, H553, H554, H555, H556, H557, H558, H559, H560, H561, H562, H563, H564, H565, H566, H567, H568, H569, H570, H571, H572, H573, H574, H575, H576, H577, H578, H579, H580, H581, H582, H583, H584, H585, H586, H587, H588, H589, H590, H591, H592, H593, H594, H595, H596, H597, H598, H599, H600, H601, H602, H603, H604, H605, H606, H607, H608, H609, H610, H611, H612, H613, H614, H615, H616, H617, H618, H619, H620, H621, H622, H623, H624, H625, H626, H627, H628, H629, H630, H631, H632, H633, H634, H635, H636, H637, H638, H639, H640, H641, H642, H643, H644, H645, H646, H647, H648, H649, H650, H651, H652, H653, H654, H655, H656, H657, H658, H659, H660, H661, H662, H663, H664, H665, H666, H667, H668, H669, H670, H671, H672, H673, H674, H675, H676, H677, H678, H679, H680, H681, H682, H683, H684, H685, H686, H687, H688, H689, H690, H691, H692, H693, H694, H695, H696, H697, H698, H699, H700, H701, H702, H703, H704, H705, H706, H707, H708, H709, H710, H711, H712, H713, H714, H715, H716, H717, H718, H719, H720, H721, H722, H723, H724, H725, H726, H727, H728, H729, H730, H731, H732, H733, H734, H735, H736, H737, H738, H739, H740, H741, H742, H743, H744, H745, H746, H747, H748, H749, H750, H751, H752, H753, H754, H755, H756, H757, H758, H759, H760, H761, H762, H763, H764, H765, H766, H767, H768, H769, H770, H771, H772, H773, H774, H775, H776, H777, H778, H779, H780, H781, H782, H783, H784, H785, H786, H787, H788, H789, H790, H791, H792, H793, H794, H795, H796, H797, H798, H799, H800, H801, H802, H803, H804, H805, H806, H807, H808, H809, H810, H811, H812, H813, H814, H815, H816, H817, H818, H819, H820, H821, H822, H823, H824, H825, H826, H827, H828, H829, H830, H831, H832, H833, H834, H835, H836, H837, H838, H839, H840, H841, H842, H843, H844, H845, H846, H847, H848, H849, H850, H851, H852, H853, H854, H855, H856, H857, H858, H859, H860, H861, H862, H863, H864, H865, H866, H867, H868, H869, H870, H871, H872, H873, H874, H875, H876, H877, H878, H879, H880, H881, H882, H883, H884, H885, H886, H887, H888, H889, H890, H891, H892, H893, H894, H895, H896, H897, H898, H899, H900, H901, H902, H903, H904, H905, H906, H907, H908, H909, H910, H911, H912, H913, H914, H915, H916, H917, H918, H919, H920, H921, H922, H923, H924, H925, H926, H927, H928, H929, H930, H931, H932, H933, H934, H935, H936, H937, H938, H939, H940, H941, H942, H943, H944, H945, H946, H947, H948, H949, H950, H951, H952, H953, H954, H955, H956, H957, H958, H959, H960, H961, H962, H963, H964, H965, H966, H967, H968, H969, H970, H971, H972, H973, H974, H975, H976, H977, H978, H979, H980, H981, H982, H983, H984, H985, H986, H987, H988, H989, H990, H991, H992, H993, H994, H995, H996, H997, H998, H999, H1000	
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7	1-Methoxy-2-propyl acetate R10 -----  Flam. Liq. 3, H226	3-10%

**Additional information:** For the wording of the listed risk phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information:**

Immediately remove any clothing contaminated by the product. Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor. In case of unconsciousness bring patient into stable side position for transport.

**After skin contact:**

Instantly wash with water and soap and rinse thoroughly. Seek medical treatment.

**After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water. Do not induce vomiting; instantly call for medical help.

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

No further relevant information available.

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

symptomatic treatment

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents:**

Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents:** Water with a full water jet.

### 5.2 Special hazards arising from the substance or mixture

Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)  
Can form explosive vapour-air mixtures.

### 5.3 Advice for firefighters

**Protective equipment:**

Wear self-contained breathing apparatus.

**Additional information:**

Cool endangered containers with water spray jet.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.  
Remove all ignition sources.  
Do not breathe vapour.  
Avoid contact with skin and eyes.

### 6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.  
Prevent material from reaching sewage system, holes and cellars.

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

Ensure adequate ventilation.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.

### 6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
Ensure good interior ventilation, especially at floor level (fumes are heavier than air).  
Use only in well ventilated areas.  
Avoid contact with skin and eyes.  
Do not breathe vapour/spray.  
Make sure that all applicable workplace limits are observed.

### Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.  
Flammable fume/air mixtures may be formed in empty containers.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

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

#### Storage

#### Requirements to be met by storerooms and containers:

Observe all local and national regulations for storage of water polluting products.  
Observe regulations for storage of flammable liquids.

#### Information about storage in one common storage facility:

Observe regulations for storage of flammable liquids.

#### Further information about storage conditions:

Store container in a well ventilated position.  
Store in cool, dry conditions in well sealed containers.  
Protect from heat and direct sunlight.

### 7.3 Specific end use(s)

No further relevant information available.

## ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

**Additional information about design of technical systems:** No further data; see item 7.

### 8.1 Control parameters

Components with critical values that require monitoring at the workplace:	
<b>1330-20-7 Xylene, mixture of isomers</b>	
WEL (Great Britain)	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
IOELV (European Union)	Short-term value: 442 mg/m <sup>3</sup> , 100 ppm Long-term value: 221 mg/m <sup>3</sup> , 50 ppm Skin
<b>123-86-4 n-Butyl acetate</b>	
WEL (Great Britain)	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
<b>108-65-6 1-Methoxy-2-propyl acetate</b>	
WEL (Great Britain)	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
IOELV (Europäische Union)	Short-term value: 550 mg/m <sup>3</sup> , 100 ppm Long-term value: 275 mg/m <sup>3</sup> , 50 ppm Skin

DNELs:		
<b>108-65-6 1-Methoxy-2-propyl acetate</b>		
Oral	DNEL long-term exposure - systemic effects	1,67 mg/kg bw/d (general population)
Dermal	DNEL long-term exposure - systemic effects	54,8 mg/kg bw/d (general population) 153,5 mg/kg bw/d (Worker)
Inhalative	DNEL long-term exposure - systemic effects	33 mg/m <sup>3</sup> (general population) 275 mg/m <sup>3</sup> (worker)

PNECs:	
<b>108-65-6 1-Methoxy-2-propyl acetate</b>	

PNEC	0,635 mg/l (aqua (freshwater)) 6,35 mg/l (aqua (intermittent releases)) 0,0635 mg/l (aqua (marine water)) 3,29 mg/kg (sediment (freshwater)) 0,329 mg/kg (sediment (marine water)) 0,29 mg/kg (soil) 100 mg/l (STP (sewage treatment plant))
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Ingredients with biological limit values:	
1330-20-7 Xylene, mixture of isomers	
BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

**Additional information:**

The lists that were valid during the compilation were used as basis.

**8.2**

**Exposure controls**

**Personal protective equipment**

**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and food.  
Instantly remove any contaminated garments.  
Do not eat, drink or smoke while working.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.  
Wash hands during breaks and at the end of the work.

**Breathing equipment:**

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

**Protection of hands:**

Protective gloves  
To avoid skin problems reduce the wearing of gloves to the required minimum.  
Check the permeability prior to each renewed use of the glove.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
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.

**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 cannot be calculated in advance and has therefore to be checked prior to the application.

<b>Penetration time of glove material:</b>	Protective gloves should be replaced at first signs of wear. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
<b>Eye protection:</b>	Tightly sealed safety glasses.
<b>Body protection:</b>	Protective work clothing Body protection must be chosen depending on activity and possible exposure.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### General Information

#### Appearance:

<b>Form:</b>	liquid
<b>Colour:</b>	different according to colour
<b>Smell:</b>	solvent-like
<b>Odour threshold:</b>	no data available

<b>pH-value:</b>	not applicable
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#### Change in condition

- Melting point/Melting range:	not determined
- Boiling point/Boiling range:	not determined

<b>Flash point</b>	> 23 °C
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<b>Inflammability (solid, gaseous)</b>	not applicable
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<b>Ignition temperature:</b>	370 °C
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<b>Decomposition temperature:</b>	not determined
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<b>Self-inflammability:</b>	Product is not selfigniting.
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<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
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#### Critical values for explosion:

- Lower:	1,1 Vol %
- Upper:	10,4 Vol %
<b>Oxidizing properties:</b>	not applicable

<b>Vapor pressure:</b>	not determined
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<b>Density at 20 °C:</b>	1,1 - 1,3 g/cm <sup>3</sup>
<b>Relative density at 20 °C:</b>	1,1 - 1,3 (H <sub>2</sub> O = 1)

<b>Vapour density (AIR = 1):</b>	not determined
<b>Evaporation rate:</b>	not determined
<b>Solubility in / Miscibility with water:</b>	not miscible or difficult to mix
<b>Partition coefficient (n-octanol/water):</b>	not determined
<b>Viscosity:</b>	
- dynamic:	not determined
- kinematic at 20 °C:	> 40 s (ISO 6 mm)

9.2 **Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

10.1	<b>Reactivity</b>	see 10.3
10.2	<b>Chemical stability</b>	
	<b>Thermal decomposition / conditions to be avoided:</b>	Avoid impact, friction, heat, sparks, electrostatic charges.
10.3	<b>Possibility of hazardous reactions</b>	Flammable vapour-air mixtures may develop. Used empty containers may contain product gases which form explosive mixtures with air.
10.4	<b>Conditions to avoid</b>	No further relevant information available.
10.5	<b>Incompatible materials:</b>	Strong oxidizing agents
10.6	<b>Hazardous decomposition products:</b>	Carbon monoxide (CO) and Carbon dioxide (CO <sub>2</sub> )

## SECTION 11: Toxicological information

11.1 **Information on toxicological effects**  
**Acute toxicity:**

LD/LC50 values that are relevant for classification:		
<b>1330-20-7 Xylene, mixture of isomers</b>		
Oral	LD50	8700 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	6350 mg/l (rat)
<b>123-86-4 n-Butyl acetate</b>		



Oral	LD50	13100 mg/kg (rat)
Dermal	LD50	14100 mg/kg (rabbit)
Inhalative	LC50/4 h	> 21 mg/l (rat)
<b>108-65-6 1-Methoxy-2-propyl acetate</b>		
Oral	LD50	8532 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	35,7 mg/l (rat)

**Primary irritant effect:**

**on the skin:**

Irritant for skin and mucous membranes.

**on the eye:**

Short time, reversible irritating effect.

**Subacute to chronic toxicity:**

not classified.

**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

Danger by skin resorption.

**Sensitisation**

No sensitizing effect known.

**Repeated dose toxicity**

not classified

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** According to present knowledge no CMR-effects known.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic Toxicity:	
<b>1330-20-7 Xylene, mixture of isomers</b>	
EC50	1 - 10 mg/l (bacteria)
EC50/24 h	165 mg/l (water flea (Daphnia magna))
IC50/72 h	1 - 10 mg/l (algae)
LC50/48 h	86 mg/l (Leuciscus idus)
LC50/96 h	14 mg/l (rainbow trout (Oncorhynchus mykiss))
<b>123-86-4 n-Butylacetat</b>	
EC50	959 mg/l (Pseudomonas putida) (EC10)
EC50/24 h	72,8 mg/l (water flea (Daphnia magna))
IC50/72 h	674,7 mg/l (algae (Scenedesmus subspicatus))
LC50/96 h	62 mg/l (Leuciscus idus)
	100 mg/l (bluegill (Lepomis macrochirus))
	18 mg/l (fathead minnow (Pimephales promelas))
NOEC/21 d	23 mg/l (water flea (Daphnia magna))
<b>108-65-6 1-Methoxy-2-propyl acetate</b>	


IC50/96 h	100 - 180 mg/l (rainbow trout ( <i>Oncorhynchus mykiss</i> )) (OECD 203)
LC50/96 h	IUCLID 100-180 mg/l (red killifish ( <i>Oryzias latipes</i> )) (OECD 203) ECHA-Reg.-Dossier (1987-09-21)

<b>12.2 Persistence and degradability:</b>	No further relevant information available.
<b>12.3 Bioaccumulative potential:</b>	No further relevant information available.
<b>12.4 Mobility in soil</b>	No further relevant information available.
<b>Additional ecological information:</b>	
<b>General notes:</b>	Water hazard class 2 (Self-assessment): hazardous for water
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>PBT:</b>	
<b>vPBT:</b>	Not applicable Not applicable
<b>12.6 Other adverse effects:</b>	No further relevant information available.

### SECTION 13: Disposal considerations

<b>13.1 Waste treatment methods</b>	
<b>Recommendation:</b>	Disposal must be made according to official regulations.
<b>European waste catalogue:</b>	Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
<b>Uncleaned packagings:</b>	
<b>Recommendation:</b>	Disposal must be made according to official regulations.

### SECTION 14: Transport information

<b>14.1 UN-Number</b> <b>ADR, IMDG, IATA</b>	UN1263
<b>14.2 UN proper shipping name</b> <b>ADR</b> <b>IMDG, IATA</b>	UN 1263 PAINT, Special provision 640E PAINT
<b>14.3 Transport hazard class(es)</b> <b>ADR</b>	
<b>Class</b>	3 (F1) Flammable liquids.
<b>Label</b>	3
<b>IMDG, IATA</b>	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3

<b>14.4</b>	<b>Packing group</b> ADR, IMDG, IATA	III
<b>14.5</b>	<b>Environmental hazards:</b> <b>Marine pollutant:</b>	No
<b>14.6</b>	<b>Special precautions for use</b> <b>Kemler-Number:</b> <b>EMS-Number:</b>	Warning: Flammable liquids. 30 F-E, <u>S-E</u>
<b>14.7</b>	<b>Transport in bulk according to 73/78 and the IBC Code</b>	Not applicable
	<b>Transport/Additional information:</b> <b>ADR</b> <b>Excepted quantities (EQ):</b> <b>Limited quantities (LQ):</b> <b>Transport category:</b> <b>Tunnel restriction code:</b> <b>Remarks:</b>	E1 5L 3 D/E According to 2.2.3.1.5 ADR/RID the product in receptacles of less than 450 litres capacity is not subject to ADR/RID.
	<b>IMDG</b> <b>Remarks:</b>	According to 2.3.2.5 IMDG-Code the product in receptacles of less than 30 litres capacity is not subject to IMDG-Code.
	<b>UN "Model Regulation":</b>	UN1263, PAINT, Special provision 640E, 3, III

### SECTION 15: Regulatory information

<b>15.1</b>	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b> <b>National regulations:</b>	
	<b>Information about limitation of use:</b>	Employment restrictions concerning young persons must be observed.
	<b>Decree to be applied in case of technical fault:</b>	Quantity limits according to "EC Seveso directive" should be observed.
	<b>Water hazard class:</b>	Water hazard class 2 (Self-assessment): hazardous for water
<b>15.2</b>	<b>Chemical safety assessment:</b>	A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases:

The(se) R- resp. H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation/mixture.

H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.  
H336 May cause drowsiness or dizziness.

R10 Flammable.  
R20/21 Harmful by inhalation and in contact with skin.  
R38 Irritating to skin.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

**Department issuing MSDS:**

SISTEC Coatings GmbH  
Mausenstr. 6/1  
71640 Ludwigsburg, Germany  
Tel: +49 (0)7141 990 5516 / Fax: +49(0)7141 990 5522  
E-Mail: [info@sistec-coatings.de](mailto:info@sistec-coatings.de)

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
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)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Flam. Liq. 3: Flammable liquids, Hazard Category 3  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3