Safety Data Sheet
acc. to OSHA HCS

Printing date 06/28/2017 Reviewed on 06/21/2017

*
1 Identification

· **Product identifier**

· **Trade name: 50121 & 50124 World Class DTM Epoxy Primer**

· **Article number:** 50121, 50124
· **Application of the substance / the mixture** Coating

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2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**
ACETOACETATE RESIN
Talc
4-chloro-alpha,alpha,alpha-trifluorotoluene
EPOXY RESIN
Fluorosufactant
· **Hazard statements**
H225 Highly flammable liquid and vapor.

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H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:**
Mixture: consisting of the following components.
Weight percentages

· **Dangerous components:**		
7727-43-7	barium sulphate, natural	13 - 30%
67-64-1	acetone	13 - 30%
	ACETOACETATE RESIN	13 - 30%
14807-96-6	Talc	10 -13%
110-43-0	heptan-2-one	7 - 10%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	1.5 - 5%
25036-25-3	EPOXY RESIN	1.5 - 5%
1330-20-7	xylene	1-1.5%
	Fluorosufactant	≤1%

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4 First-aid measures

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

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5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

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· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
13463-67-7	titanium dioxide	30 mg/m3
7727-43-7	barium sulphate, natural	15 mg/m3
67-64-1	acetone	200 ppm
110-43-0	heptan-2-one	150 ppm
7779-90-0	trizinc bis(orthophosphate)	12 mg/m3
25036-25-3	EPOXY RESIN	12 mg/m3
1314-13-2	zinc oxide	10 mg/m3
1330-20-7	xylene	130 ppm
71-36-3	butan-1-ol	60 ppm
1333-86-4	Carbon black	9 mg/m3
108-88-3	toluene	67 ppm
111-76-2	2-butoxyethanol	60 ppm
100-41-4	ethylbenzene	33 ppm
7631-86-9	silicon dioxide, chemically prepared	18 mg/m3
21645-51-2	aluminium hydroxide	8.7 mg/m3

· **PAC-2:**		
13463-67-7	titanium dioxide	330 mg/m3
7727-43-7	barium sulphate, natural	170 mg/m3
67-64-1	acetone	3200* ppm
110-43-0	heptan-2-one	670 ppm
7779-90-0	trizinc bis(orthophosphate)	36 mg/m3
25036-25-3	EPOXY RESIN	130 mg/m3
1314-13-2	zinc oxide	15 mg/m3
1330-20-7	xylene	920* ppm
71-36-3	butan-1-ol	800 ppm
1333-86-4	Carbon black	99 mg/m3
108-88-3	toluene	560 ppm
111-76-2	2-butoxyethanol	120 ppm
100-41-4	ethylbenzene	1100* ppm
7631-86-9	silicon dioxide, chemically prepared	740 mg/m3
21645-51-2	aluminium hydroxide	73 mg/m3

· **PAC-3:**		
13463-67-7	titanium dioxide	2,000 mg/m3

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7727-43-7	barium sulphate, natural	990 mg/m3
67-64-1	acetone	5700* ppm
110-43-0	heptan-2-one	4000* ppm
7779-90-0	trizinc bis(orthophosphate)	220 mg/m3
25036-25-3	EPOXY RESIN	790 mg/m3
1314-13-2	zinc oxide	2,500 mg/m3
1330-20-7	xylene	2500* ppm
71-36-3	butan-1-ol	8000** ppm
1333-86-4	Carbon black	590 mg/m3
108-88-3	toluene	3700* ppm
111-76-2	2-butoxyethanol	700 ppm
100-41-4	ethylbenzene	1800* ppm
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m3
21645-51-2	aluminium hydroxide	440 mg/m3

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7 Handling and storage

· **Handling:**
· **Precautions for safe handling** No special measures required.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

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

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

7727-43-7 barium sulphate, natural	
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction

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TLV	Long-term value: 5* mg/m³ *inhalable fraction; E
67-64-1 acetone	
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: 1187 mg/m³, 500 ppm Long-term value: 594 mg/m³, 250 ppm BEI
110-43-0 heptan-2-one	
PEL	Long-term value: 465 mg/m³, 100 ppm
REL	Long-term value: 465 mg/m³, 100 ppm
TLV	Long-term value: 233 mg/m³, 50 ppm
1330-20-7 xylene	
PEL	Long-term value: 435 mg/m³, 100 ppm
REL	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm
TLV	Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI

· **Ingredients with biological limit values:**	
67-64-1 acetone	
BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
1330-20-7 xylene	
BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Protective gloves

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

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

· ***Penetration time of glove material***
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· ***Eye protection:***

Tightly sealed goggles

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9 Physical and chemical properties

· ***Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	*Liquid*
Color:	*According to product specification*
· ***Odor:***	*Characteristic*
· ***Odor threshold:***	*Not determined.*
· ***pH-value:***	*Not determined.*
· ***Change in condition***	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*55 °C*
· ***Flash point:***	*-19 °C*
· ***Flammability (solid, gaseous):***	*Not applicable.*
· ***Ignition temperature:***	*465 °C*
· ***Decomposition temperature:***	*Not determined.*
· ***Auto igniting:***	*Product is not selfigniting.*
· ***Danger of explosion:***	*In use, may form flammable/explosive vapour-air mixture.*
· ***Explosion limits:***	
Lower:	*2.6 Vol %*
Upper:	*13.0 Vol %*
· ***Vapor pressure at 20 °C:***	*233 hPa*
· ***Density at 20 °C:***	*1.61493 g/cm³*
· ***Relative density***	*Not determined.*

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· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	27.3 %
VOC content:	9.3 % 225.3 g/l / 1.88 lb/gl
Solids content:	72.7 %
· **Other information**	No further relevant information available.

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10 Stability and reactivity

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

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11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**		
7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	>5000 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** Sensitization possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
13463-67-7	titanium dioxide	2B
14807-96-6	Talc	3
1330-20-7	xylene	3

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1333-86-4	Carbon black	2B
108-88-3	toluene	3
111-76-2	2-butoxyethanol	3
100-41-4	ethylbenzene	2B
7631-86-9	silicon dioxide, chemically prepared	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1263

· **UN proper shipping name**
· **DOT** Paint
· **ADR** 1263 Paint, ENVIRONMENTALLY HAZARDOUS, special provision 640D
· **IMDG, IATA** PAINT

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· **Transport hazard class(es)**

· **DOT**

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

· **ADR**

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

· **IMDG, IATA**

· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special marking (ADR):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Flammable liquids
· **EMS Number:**	F-E,S-E
· **Stowage Category**	B
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· **ADR**	
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **IMDG**	
· **Limited quantities (LQ)**	5L

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· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II, ENVIRONMENTALLY HAZARDOUS

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**	
None of the ingredient is listed.	

· **Section 313 (Specific toxic chemical listings):**	
7727-43-7	barium sulphate, natural
14807-96-6	Talc
7779-90-0	trizinc bis(orthophosphate)
1314-13-2	zinc oxide
1330-20-7	xylene
71-36-3	butan-1-ol
	Acrylic Resin
108-88-3	toluene
111-76-2	2-butoxyethanol
100-41-4	ethylbenzene

· **TSCA (Toxic Substances Control Act):**	
13463-67-7	titanium dioxide
7727-43-7	barium sulphate, natural
67-64-1	acetone
14807-96-6	Talc
110-43-0	heptan-2-one
7779-90-0	trizinc bis(orthophosphate)
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
25036-25-3	EPOXY RESIN
1314-13-2	zinc oxide
1330-20-7	xylene
71-36-3	butan-1-ol
51274-00-1	YELLOW IRON OXIDE
1333-86-4	Carbon black
108-88-3	toluene
111-76-2	2-butoxyethanol
100-41-4	ethylbenzene
7631-86-9	silicon dioxide, chemically prepared
21645-51-2	aluminium hydroxide

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· **Proposition 65**

· **Chemicals known to cause cancer:**	
13463-67-7	titanium dioxide
25036-25-3	EPOXY RESIN
1330-20-7	xylene
1333-86-4	Carbon black
100-41-4	ethylbenzene

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**	
108-88-3	toluene

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
7727-43-7	barium sulphate, natural	D, CBD(inh), NL(oral)
67-64-1	acetone	I
7779-90-0	trizinc bis(orthophosphate)	D, I, II
1314-13-2	zinc oxide	D, I, II
1330-20-7	xylene	I
71-36-3	butan-1-ol	D
108-88-3	toluene	II
111-76-2	2-butoxyethanol	NL
100-41-4	ethylbenzene	D

· **TLV (Threshold Limit Value established by ACGIH)**		
13463-67-7	titanium dioxide	A4
67-64-1	acetone	A4
14807-96-6	Talc	A4
1330-20-7	xylene	A4
1333-86-4	Carbon black	A4
108-88-3	toluene	A4
111-76-2	2-butoxyethanol	A3
100-41-4	ethylbenzene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
13463-67-7	titanium dioxide
1333-86-4	Carbon black

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

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· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**
ACETOACETATE RESIN
Talc
4-chloro-alpha,alpha,alpha-trifluorotoluene
EPOXY RESIN
Fluorosufactant

· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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16 Other information

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

· **Department issuing SDS:** *Environment protection department.*

· **Date of preparation / last revision** *06/28/2017 / 9*

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord 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
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **** Data compared to the previous version altered.***