according to Regulation (EC) No. 830/2015

TECNOGRIP 2K METAL

Version 1.7

Revision Date 15.02.2018

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

1.1 Product identifier

Trade name	:	TECNOGRIP 2K METAL
Product code	:	L0290134

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

Use of the Substance/Mixture	:	Paints, varnishes and enamels
Chemical nature	:	Dual compound enamel - finish coat

1.3 Details of the supplier of the safety data sheet

Company	: Lechler SpA
	Via Cecilio 17
	22100 Como- CO-
Telephone	: +39031586111
Telefax	: +39031586206
E-mail address	: safety@lechler.eu
Responsible/issuing person	

1.4 Emergency telephone number

Tel. +39-031-586301 - This telephone number is available during office hours only. (8.00-18.00)

This telephone number is available during office hours only.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 Skin sensitisation, Category 1 Chronic aquatic toxicity, Category 2 H226: Flammable liquid and vapour.

H317: May cause an allergic skin reaction.

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



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Signal word	: Warning		
Hazard statements		Flammable liquid and vapo May cause an allergic skin Toxic to aquatic life with lor	reaction.
Precautionary statements	P261	Keep away from heat/spar flames/hot surfaces. No sn Avoid breathing vapours. Avoid release to the enviro	noking.
	P303 + P361 + P3	53 IF ON SKIN (or hair): immediately all contaminat Rinse skin with water/show	ed clothing.
	P362 + P364	Take off contaminated cloth before reuse.	ning and wash it
		In case of fire: Use dry san or alcohol-resistant foam to	

Hazardous components which must be listed on the label:

•	1065336-91-5	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl
		1,2,2,6,6-pentamethyl-4-piperidyl sebacate

• 26761-45-5 2,3-epoxypropyl neodecanoate

2.3 Other hazards

None known. No hazards resulting from the material as supplied. The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Liquid pigmented dispersion

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
trizinc bis(orthophosphate)	7779-90-0 231-944-3 01-2119485044-40	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 5 - < 10
xylene	1330-20-7 215-535-7	Flam. Liq. 3; H226 Acute Tox. 4; H332	>= 1 - < 5

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	01-2119488216-32	Acute Tox. 4; H312 Skin Irrit. 2; H315 Note C	
zinc oxide	1314-13-2 215-222-5 01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 (Acute M=1) (Chronic M=1)	>= 0,25 - < 1
Reaction mass of Bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	1065336-91-5 915-687-0 01-2119491304-40-0000	Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,25 - < 1
Substances with a work	place exposure limit :		
Talc (Mg3H2(SiO3)4)	14807-96-6 238-877-9		>= 5 - < 10
n-butyl acetate	123-86-4 204-658-1 01-2119485493-29	EUH066 Flam. Liq. 3; H226 STOT SE 3; H336	>= 5 - < 10
aluminium orthophosphate	7784-30-7 232-056-9 01-2119971255-34-0006		>= 1 - < 5

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	 When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
If inhaled	 Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	 Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Put shower on working place
In case of eye contact	 Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice. 3 / 16

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	Put eye-washer on working place Remove contact lenses.	
If swallowed	: If accidentally swallowed obtain immed Do NOT induce vomiting. Keep at rest.	iate medical attention.
4.2 Most important symptoms and ef	fects, both acute and delayed	
Symptoms	: No information available.	
Risks	: No information available.	
4.3 Indication of any immediate med	ical attention and special treatment needed	
Treatment	: The first aid procedure should be established with the doctor responsible for industrial Seek medical advice.	
SECTION 5: Firefighting meas	ures	
5.1 Extinguishing media		
Suitable extinguishing media	: Use water spray, alcohol-resistant foan carbon dioxide. Keep containers and surroundings cool	-
Unsuitable extinguishing media	: Do NOT use water jet.	
5.2 Special hazards arising from t	ne substance or mixture	
Specific hazards during firefighting	 As the product contains combustible or will produce dense black smoke contain products of combustion (see section 10 Exposure to decomposition products m health. Cool closed containers exposed to fire Collect contaminated fire extinguishing must not be discharged into drains. Fire residues and contaminated fire ext be disposed of in accordance with loca 	ning hazardous)). ay be a hazard to with water spray. water separately. This inguishing water must
5.3 Advice for firefighters		
Special protective equipment for firefighters	: Wear self-contained breathing apparate necessary.	us for firefighting if

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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Personal precautions	 Solvent vapours are heavier than air an floors. Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of s Ventilate the area. 	
6.2 Environmental precautions		
Environmental precautions	 Try to prevent the material from entering courses. If the product contaminates rivers and la respective authorities. 	-
6.3 Methods and materials for cor	ntainment and cleaning up	
Methods for cleaning up	 Clean with detergents. Avoid solvents. Contain and collect spillages with non-c materials, e.g. sand, earth, vermiculite, and place in a suitable container. The c should be cleaned up immediately with decontaminant. One possible (flammab comprises water (45 parts by volume)/e (50 parts)/concentrated (d: 0.880) ammonia solution (5 parts). / alternative is sodium carbonate (5 parts) 	diatomaceous earth contaminated area a suitable ble) decontaminant thanol or isopropanol A non-flammable)/water (95 parts).
	Pick up and transfer to properly labelled Clean contaminated surface thoroughly. Dam up. Soak up with inert absorbent material an hazardous waste.	

6.4 Reference to other sections

Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	: Avoid exceeding the given occupational exposure limits (see section 8).
	Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing.
	Smoking, eating and drinking should be prohibited in the
	application area.
	Avoid inhalation of vapour or mist.
	For personal protection see section 8.
	Thoroughly mix before using
	After using, store in a well-sealed container

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TECNOGRIP 2K METAL Version 1.7 Revision Date 15.02.2018 Print Date 31.03.2020 Advice on protection against : Prevent the creation of flammable or explosive concentrations fire and explosion of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	 Observe label precautions. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Electrical installations / working materials must comply with the technological safety standards. Keep away from sources of ignition - No smoking. Store between 5° an 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight. Store in accordance with the particular national regulations.
Advice on common storage	: Keep away from oxidizing agents and strongly acid or alkaline materials.

7.3 Specific end use(s)

: This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Talc	14807-96-	TWA			ACGIH
(Mg3H2(SiO3)4)	6		2 mg/m3		
n-butyl	123-86-4	TWA	150 ppm	2007-01-01	ACGIH
acetate			713 mg/m3		
		STEL	200 ppm 950 mg/m3	2007-01-01	ACGIH
xylenes	1330-20-7	TWA	50 ppm 221 mg/m3	2000-06-16	2000/39/EC
Further	: skin: Identi	fies the poss	ibility of significant upta	ake through the skinIndic	ative

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information					
		STEL	100 ppm	2000-06-16	2000/39/EC
			442 mg/m3		
Further information	: skin: Iden	ifies the poss	ibility of significant υ	ptake through the skinli	ndicative
aluminium orthophosphat	7784-30-7	TWA	1 mg/m3	2008-01-01	ACGIH
e					
zinc oxide	1314-13-2	TWA	2 mg/m3	2007-01-01	ACGIH
		STEL	10 mg/m3	2007-01-01	ACGIH

DNEL trizinc bis(orthophosphate)

trizinc bis(orthophosphate)	End Use: Workers Exposure routes: Inhalation Potential health effects: Local effects Value: 5 mg/m3
	End Use: Workers Exposure routes: Skin contact Potential health effects: Local effects Value: 83 ppm
	End Use: Consumers Exposure routes: Skin contact Potential health effects: Local effects Value: 83 ppm
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Local effects Value: 2,5 mg/m3
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Chronic effects Value: 0,83 ppm
zinc oxide	End Use: Workers Exposure routes: Inhalation Potential health effects: Local effects Value: 5 mg/m3
	End Use: Workers Exposure routes: Skin contact Potential health effects: Local effects Exposure time: 8 h Value: 83 ppm
	End Use: Consumers

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	Exposure routes: Skin contact Potential health effects: Local effects Exposure time: 8 h Value: 83 ppm	
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Local effects Value: 2,5 mg/m3	
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Chronic effects Exposure time: 8 h Value: 0,83 ppm	
n-butyl acetate	 End Use: Professional use Exposure routes: Skin contact Potential health effects: Local effects Exposure time: 8 h Value: 7 ppm 	
	End Use: Professional use Exposure routes: Inhalation Potential health effects: Local effects Value: 48 mg/m3	
PNEC trizinc bis(orthophosphate)	: Fresh water Value: 0,206 mg/1	
	Marine water Value: 0,0061 mg/l	
	Fresh water sediment Value: 117,8 mg/kg	
	Marine sediment Value: 56,5 mg/kg	
	Soil Value: 35,6 mg/kg	
zinc oxide	: Fresh water Value: 0,0206 mg/l	
	Marine water Value: 0,0061 mg/l	

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	Marine sediment Value: 56,5 mg/kg	
	Soil Value: 35,6 mg/kg	
n-butyl acetate	: Water Value: 0,18 mg/l	
	Soil Value: 0,093 mg/kg	
3.2 Exposure controls		
Personal protective equipme	ent	
Respiratory protection	 Apply technical measures to comply with exposure limits. This should be achieved by a good general practically feasible- by the use of a local. If the occupational exposure limits cannol cases suitable respiratory equipment should short period of time. Respirator with combination filter for variable. 	al extraction and -if exhaust ventilation. t be met, in exceptional lld be worn only for a
Hand protection	 Solvent-resistant gloves (butyl-rubber) For prolonged or repeated contact use pro Protective gloves complying with EN 374 Please observe the instructions regarding breakthrough time which are provided by gloves. Also take into consideration the sp under which the product is used, such as t abrasion, and the contact time. If used in solution, or mixed with other su conditions which differ from EN 374, cor CE approved gloves. Barrier creams may help to protect the ex should however not be applied once expo Skin should be washed after contact. Wash your hands and put on barrier cream 	4. permeability and the supplier of the pecific local conditions the danger of cuts, ubstances, and under ntact the supplier of the sposed areas of skin, they soure has occurred.
Eye protection	: Chemical resistant goggles must be worn.	
Skin and body protection	: Skin should be washed after contact. Working clothes must not consist of textil dangerous melting behaviour in case of fi Personnel should wear protective clothing Workers should wear antistatic footwear.	ire.

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General advice	: Try to prevent the material from entering of If the product contaminates rivers and lake respective authorities.	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Odour	: solvent-like
Flash point	: > 23 - 55 °C
Ignition temperature	: not determined
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Auto-ignition temperature	: Not applicable
рН	: not determined
Freezing point	: Not applicable
Boiling point	: not determined
Vapour pressure	: 1 hPa at 50 °C
Density	: 1,8136 g/cm3
Water solubility	: not determined
Partition coefficient: n- octanol/water Solubility in other solvents	: No data available : not determined
Flow time	: 65 s 6 mm Method: ISO/DIN 2431 '84
Relative vapour density	: Not applicable
Evaporation rate	: not determined
9.2 Other information	
Solids by weight	: 85,95 %
Volatile organic compounds	: 14,05 % 10 / 16

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SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

Conditions to avoid	 Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions. Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it.
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10.5 Incompatible materials

Materials to avoid	: Keep away from oxidizing agents, strongly alkaline and
	strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

Hazardous decomposition products	•	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.
Thermal decomposition	:	Not applicable

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l, 4 h, vapour, Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 2.000 mg/kg, Calculation method
Skin corrosion/irritation	:	Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin., The product may be absorbed through the skin.
Further information	:	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

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Components:		
xylene :		
Acute dermal toxicity	: Acute toxicity estimate: 1.100 mg/kg point estimate	, Converted acute toxicity
zinc oxide : Acute oral toxicity	: LD50: 7.950 mg/kg, Mouse	
Acute inhalation toxicity	: LC50: > 5.700 mg/l, 4 h, Rat,	
Acute dermal toxicity	: LD50: > 2.000 mg/kg, Rat	

Acute oral toxicity : LD50: 3.23	30 mg/kg, Rat
----------------------------------	---------------

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish :	Remarks: No data is available on the product itself.	
Toxicity to fish Reaction mass of : Bis(1,2,2,6,6-pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	LC50: 0,97 mg/l Exposure time: 96 h Species: Lepomis macrochirus (Bluegill sunfish) Method: OECD Test Guideline 203 LC50: 7,9 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 203 LC50: 0,9 mg/l Exposure time: 96 h	
	Species: Brachydanio rerio (zebrafish) semi-static test Method: OECD Test Guideline 203	
zinc oxide : 1 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)		

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Reaction mass of Bis(1,2,2,6,6-pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	: NOEC: 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211	
12.2 Persistence and degradability		
Biodegradability	: No data available	
12.3 Bioaccumulative potential		
Bioaccumulation	: No data available	
12.4 Mobility in soil		
Mobility	: No data available	

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological	:	The product contains dangerous substances for the
information		environment (see chapter no 3).
		The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	 The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
Contaminated packaging	 Empty containers should be taken to an approved waste handling site for recycling or disposal. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. The following Waste Codes are only suggestions:150110*

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SECTION 14: Transport information

14.1 UN number

ADR	: UN 1263
IMDG	: UN 1263
ΙΑΤΑ	: UN 1263

14.2 Proper shipping name

ADR	PAINT
IMDG	PAINT
IATA	Paint

14.3 Transport hazard class(es)

ADR	:	3
IMDG	:	3
IATA	:	3

14.4 Packing group

ADR	
Packing group	: III
Classification Code	: F1
Hazard Identification Number	: 30
Labels	: 3
Special Provisions	: Special Provision 640E
IMDG	
Packing group	: III
Labels	: 3
EmS Code	: F-E,S-E
1	

: III

IATA

Packing g	roup
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Labels	: 3	
14.5 Environmental hazards		
ADR		
Environmentally hazardous	: yes	
IMDG		
Marine pollutant	: yes	
IATA		
Environmentally hazardous	: no	
14.6 Special precautions for user		

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Banned and/or restricted

123-86-4	n-butyl acetate
108-65-6	2-methoxy-1-methylethyl acetate
70657-70-4	2-methoxypropyl acetate
1589-47-5	2-methoxypropanol

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MAL-Code-Number	: 2-3 (1993) 670-m3 air/10 g	
Risk classification according to VbF	: Flash point 21 °C to 55 °C, at 15 °C not Specially dangerous flammable liquids	miscible in water
Water contaminating class (Germany)	: highly water endangering VWVWS A4	

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment

No data is available on the product itself.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.