

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name: Ceramill Liquid Set update

Article-No.: 760469 (760432-760434, 760438, 760485, 760487-760489)

Revision date:

Version: /en

Print date: 05.11.2014



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

1.1 Product identifier

Commercial Product Name **Ceramill Liquid Set update**

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

Relevant identified uses Resources for dental technology

1.3 Details of the supplier of the safety data sheet

Manufacturer Amann Girschbach AG
Herrschaftswiesen 1
A-6842 Koblach
Telephone: 0043 5523 623330
FAX: 0043 5523 55990
Email: austria@amanngirschbach.com
Internet: www.amanngirschbach.com

Marketer Amann Girschbach GmbH
Duerrenweg 40
D-75177 Pforzheim
Telephone: 0049 7231 957100
FAX: 0049 7231 957129
Email: germany@amanngirschbach.com
Internet: www.amanngirschbach.com

1.4 Emergency telephone number

Emergency telephone number +49 (0) 7231 957100
Only available during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 R36/37/38: Irritating to eyes, respiratory system and skin.

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

2.2 Label elements

Hazard pictogram



GHS07

Hazardous component(s) to be indicated on label De-ionisiertes Wasser, Polymethacrylsäure, Natriumhydroxid, Natriumhydrogensulfat, Mangan(II)-sulfat, Hydrat, Ethanol, Propane-1, 2-diol, Salzsäure ... %

H-statement(s) H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.
H290: May be corrosive to metals.
H412: Harmful to aquatic life with long lasting effects.

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P-statement(s)

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

Hazardous ingredients

Ingredient		Classification (EEC) No 67/548	Concentration
		Classification (EC) 1272/2008	
De-ionisiertes Wasser	CAS No.: 7732-18-5		90.0
Polymethacrylsäure			5.0
Natriumhydroxid	CAS No.: 1310-73-2 EC-No.: 215-185-5 Index-No.: 011-002-00-6	C; R35 Skin Corr. 1A; H314	5.0
Natriumhydrogensulfat	CAS No.: 7681-38-1 EC-No.: 231-665-7 Index-No.: 016-046-00-X	Xi; R41 Eye Dam. 1; H318	5.0
Mangan(II)-sulfat, Hydrat	CAS No.: 10034-96-5		5.0
Ethanol	CAS No.: 64-17-5 EC-No.: 200-578-6 Index-No.: 603-002-00-5	F; R11 Flam. Liq. 2; H225	1.0 - 5.0
Propane-1,2-diol	CAS No.: 57-55-6 EC-No.: 200-338-0		1.0 - 5.0
Salzsäure ... %	CAS No.: 7647-01-0 EC-No.: 231-595-7 Index-No.: 017-002-01-X	C; R34 Xi; R37 Skin Corr. 1B; H314 STOT SE 3; H335	0.5

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

No special measures are required.

If inhaled

Provide fresh air.

Seek medical attention if problems persist.

In case of skin contact

Wash with plenty of soap and water.

In case of eye contact

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

If swallowed

Rinse mouth thoroughly with water.

Seek medical attention if problems persist.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

None known until now.

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases

None known until now.

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5.3 Advice for firefighters

Special protective equipment for firefighting Wear personal protection equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions not required.

6.2 Environmental precautions

Environmental precautions No special measures are required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Maßnahmen gegen Verschütten treffen.

Advice on protection against fire and explosion No special measures are required.

7.2 Conditions for safe storage, including any incompatibilities

Storage space and container requirements at room temperature
Keep container tightly closed.
Protect against direct sunlight.
Keep only in the original container.

Hints on storage assembly not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Sodium hydroxide

Denmark

Value / mg/m ³	Note	Source
2	L	21

Source: 21 - Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer 2012

Norway

Value / mg/m ³	Note	Source
2	T	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

Sweden

Maximum admissible concentration /mg/m ³	Long-term exposure value/ mg/m ³	Remarks	Source
2	1	inhalable dust	25

Source: 25 - HYGIENISKA GRÄNSVÄRDEN OCH ÅTGÄRDER MOT LUFTFÖRORENINGAR 2011:18

Finland

Long-term exposure value/ mg/m ³	Source
2	23

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Source: 23 - HTTP-arvot 2012:5 HAITALLISIKSI TUNNETUT PITOISUUDET

Poland

Short-term exposure value / mg/m ³	Long-term exposure value / mg/m ³	Maximum admissible concentration / mg/m ³	Source
1	0,5	-	28

Source: 28 - 28

Austria

Area of validity	Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Duration	Frequency per shift	Source
MAK	2 E	4 E	5(Mow)	8x	15

Source: 15 - Stoffliste (MAK-Werte und TRK-Werte 2012)

Switzerland

Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Remarks	Notationen	Kritische Toxizität	Source
2 e	2 e	*1)	SSC	Skin, OAW{KT} & Auge{KT}	26

*1): NIOSH, OSHA. KZGW darf im Mittel auch während 15 Minuten nicht überschritten werden.

Source: 26 - Grenzwerte am Arbeitsplatz 2014 (SUVA)

Spain

Short-term exposure value / mg/m ³	Source
2	22

Source: 22 - Límites de exposición profesional para Agentes Químicos 2013

France

Long-term exposure value / mg/m ³	FT n°	Source
2	20	20

Source: 20 - Valeurs limites d'exposition professionnelle aux agents chimiques en France (2012)

Belgium

Long-term exposure value / mg/m ³	Note	Source
2	M	35

Source: 35 - Liste de valeurs limites d'expositions professionnelle aux agents chimiques (11.06.2009)

Great Britain

Short-term exposure value / mg/m ³	Source
2	19

Source: 19 - EH40/2005 Workplace exposure limits (2011)

Czech Republic

Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Note	Source
1	2	I	30

Source: 30 - 30

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Ireland

Short-term exposure value / mg/m ³	Source
2	32

Source: 32 - Code of Practice for the Safety Health and Welfare at Work (2011)

Hungary

Long-term exposure value/ mg/m ³	Short-term exposure value / mg/m ³	Note	Remarks	Source
2	2	m	I.	31

Source: 31 - 31

Estonia

Long-term exposure value/ mg/m ³	Short-term exposure value / mg/m ³	Source
1	2*	29

Source: 29 - 29

Slovenia

Long-term exposure value/ mg/m ³	Ceiling Limit Value	Remarks	Source
2 (I)	1	Y	77

Source: 77 - 77

Lithuania

Maximum admissible concentration /mg/m ³	Note	Source
2	\$PHRASE:mkm7000;TSU_lt_20:PHRASE\$	36

Source: 36 - 36

Bulgaria

Long-term exposure value/ mg/m ³	Remarks	Source
2	\$PHRASE:mkm7000;TSU_bg_60:PHRASE\$	81

Source: 81 - 81

Greece

Long-term exposure value/ mg/m ³	Short-term exposure value / mg/m ³	Source
2	2	80

Source: 80 - 80

Mangan(II)-sulfat, Hydrat

Finland

Long-term exposure value/ mg/m ³	Remarks	Source
0,5	Mn	23

Source: 23 - HTTP-arvot 2012:5 HAITALLISIKSI TUNNETUT PITOISUUDET

Ethyl alcohol

Germany

Value / ppm	Value / mg/m ³	Ceiling Limit Value	Remarks	Issuing date	Source
500	960	2(II)	*1)	01/06	13

*1): Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der Deutschen Forschungsgemeinschaft. Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden.

Source: 13 - TRGS 900

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Denmark

Value / ppm	Value / mg/m ³	Source
1000	1900	21

Source: 21 - Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer 2012

Norway

Value / ppm	Value / mg/m ³	Source
500	950	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

Sweden

Short-term exposure value / ppm	Short-term exposure value / mg/m ³	Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Source
1000	1900	500	1000	25

Source: 25 - HYGIENISKA GRÄNSVÄRDEN OCH ÅTGÄRDER MOT LUFTFÖRORENINGAR 2011:18

Finland

Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Short-term exposure value / ppm	Short-term exposure value / mg/m ³	Source
1000	1900	1300	2500	23

Source: 23 - HTTP-arvot 2012:5 HAITALLISIKSI TUNNETUT PITOISUUDET

Poland

Short-term exposure value / mg/m ³	Long-term exposure value/ mg/m ³	Maximum admissible concentration /mg/m ³	Source
-	1900	-	28

Source: 28 - 28

Austria

Area of validity	Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Short-term exposure value / ppm	Short-term exposure value / mg/m ³	Duration	Frequency per shift	Source
MAK	1000	1900	2000	3800	60(Mow)	3x	15

Source: 15 - Stoffliste (MAK-Werte und TRK-Werte 2012)

Switzerland

Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Short-term exposure value / ppm	Short-term exposure value / mg/m ³	Remarks	Notationen	Kritische Toxizität	Source
500	960	1000	1920	INRS, NIOSH	SSC	OAW, Formal{KT HU}	26

Source: 26 - Grenzwerte am Arbeitsplatz 2014 (SUVA)

USA (ACGIH)

Remarks	Long-term value	Basis	Source
Not classifiable as a Human Carcinogen	1000 ppm	Irritation	27

Source: 27 - ACGIH Threshold Limit Values for Chemical Substances 2008

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Spain

Short-term exposure value / ppm	Short-term exposure value / mg/m ³	Note	Source
1000	1910	s	22

Source: 22 - Límites de exposición profesional para Agentes Químicos 2013

France

Long-term exposure value / ppm	Long-term exposure value / mg/m ³	Short-term exposure value / ppm	Short-term exposure value / mg/m ³	TMP n°	FT n°	Source
1000	1900	5000	9500	84	48	20

Source: 20 - Valeurs limites d'exposition professionnelle aux agents chimiques en France (2012)

Belgium

Long-term exposure value / ppm	Long-term exposure value / mg/m ³	Source
1 000	1 907	35

Source: 35 - Liste de valeurs limites d'expositions professionnelle aux agents chimiques (11.06.2009)

Netherlands

Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Skin resorption / sensibilisation	Source
260	1900	H	18

Source: 18 - Lijst met wettelijke grenswaarden 2011

Great Britain

Long-term exposure value / ppm	Long-term exposure value / mg/m ³	Source
1000	1920	19

Source: 19 - EH40/2005 Workplace exposure limits (2011)

Czech Republic

Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Source
1000	3000	30

Source: 30 - 30

Ireland

Short-term exposure value / ppm	Source
1000	32

Source: 32 - Code of Practice for the Safety Health and Welfare at Work (2011)

Hungary

Long-term exposure value / mg/m ³	Short-term exposure value / mg/m ³	Remarks	Source
1900	7600	IV.	31

Source: 31 - 31

Estonia

Long-term exposure value / mg/m ³	Long-term exposure value / ppm	Short-term exposure value / mg/m ³	Short-term exposure value / ppm	Source
1000	500	1900	1000	29

Source: 29 - 29

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Slovenia

Long-term exposure value/ mg/m ³	Long-term exposure value/ ppm	Ceiling Limit Value	Remarks	Source
1900	1000	4	Y	77

Source: 77 - 77

Lithuania

Short-term exposure value / mg/m ³	Short-term exposure value / ppm	Long-term exposure value/ mg/m ³	Long-term exposure value/ ppm	Source
1000	500	1900	1000	36

Source: 36 - 36

Bulgaria

Long-term exposure value/ mg/m ³	Source
1000	81

Source: 81 - 81

Romania

Long-term exposure value/ mg/m ³	Long-term exposure value/ ppm	Short-term exposure value / mg/m ³	Short-term exposure value / ppm	Source
1900	1000	9500	5000	79

Source: 79 - 79

Greece

Long-term exposure value/ mg/m ³	Long-term exposure value/ ppm	Source
1900	1000	80

Source: 80 - 80

Propane-1,2-diol

Norway

Value / ppm	Value / mg/m ³	Source
25	79	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

Great Britain

Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Remarks	Source
150	474	vapour and particulates	19
	10	particulate	19

Source: 19 - EH40/2005 Workplace exposure limits (2011)

Ireland

Long-term exposure value/ ppm	Long-term exposure value/ mg/m ³	Note	Source
150	470	total vapour and particulates	32
	10	particulates	32

Source: 32 - Code of Practice for the Safety Health and Welfare at Work (2011)

Lithuania

Short-term exposure value / mg/m ³	Source
7	36

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Source: 36 - 36

hydrochloric acid ... %

Finland

Short-term exposure value / mg/m ³	Source
7,6	23

Source: 23 - HTTP-arvot 2012:5 HAITALLISIKSI TUNNETUT PITOISUUDET

Hungary

Long-term exposure value/ mg/m ³	Short-term exposure value / mg/m ³	Note	Remarks	Source
8	16	i, m	EU1	31

Source: 31 - 31

8.2 Exposure controls

Respiratory protection	nicht zutreffend
Hand protection	erforderlich
Eye protection	erforderlich
Skin and body protection	Wear suitable gloves.
General protective and hygiene measures	Die berufstüblichen Hygienemaßnahmen einhalten.
Consumer exposure controls	nicht zutreffend
Engineering measures	entfällt
Other information (chapter 8.)	No special measures are required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	yellow orange
Odour	characteristic
pH	at 20° C: 1-2
Melting point [°C] / Freezing point [°C]	Freezing point: ca. 0°C
Boiling point [°C]	ca. 100°C
Flash point [°C]	kein Flammpunkt
Explosion limits [Vol-%]	
Lower limit:	not applicable
Upper limit:	not applicable
Vapour pressure [kPa]	at 20° C: nicht verfügbar
Density [g/cm ³]	at 20° C: ca. 1 g/cm ³
Relative density	nicht verfügbar

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Solubility Soluble in: Water

9.2 Other information

Ignition temperature [°C] not applicable

Other information none

SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition nicht zutreffend

10.3 Possibility of hazardous reactions

Hazardous reactions None known until now.

10.6 Hazardous decomposition products

Hazardous decomposition products None known until now.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Irritant effect on skin Causes mild skin irritation.

Irritant effect on eyes Irritation

Sensitization None known until now.

11.2 Additional information

Other information (chapter 11.) No evidence of harmful effects from available information if used properly.
Die vorliegenden Daten sind für eine toxikologische Beurteilung unzureichend
Untersuchungen zur Toxikologie liegen nicht vor

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l] Das Produkt ist nicht untersucht.

12.3 Bioaccumulative potential

Bioaccumulation nicht zutreffend

12.6 Other adverse effects

Further information on ecology Untersuchungen zur Ökologie liegen nicht vor.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations Cleaned containers may be recycled.
Dispose of waste according to applicable legislation.
Nicht gereinigte restentleerte Verpackungen: This material and its container must be disposed of as hazardous waste.

Uncleaned empty packaging Cleaned containers may be recycled.
Packing which cannot be properly cleaned must be thrown away.

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SECTION 14: Transport information

14.8 Additional information

Other information (chapter 14.) No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

Additional regulations

Xi: Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection.

SECTION 16: Other information

Relevant R-phrases

R11: Highly flammable.

R34: Causes burns.

R35: Causes severe burns.

R37: Irritating to respiratory system.

R41: Risk of serious damage to eyes.

Relevant H-phrases

H225: Highly flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

Wording of the hazard classes

Skin Corr.: Skin corrosion

Eye Dam.: Serious eye damage

Flam. Liq.: Flammable liquid

STOT SE: Specific target organ toxicity – single exposure

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.