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1. Chemical product and company identification

Product name: LiWa Iso Step 1

Application of the product:

(Isolating liquid plaster against plastic)

Manufacturer:

Willmann + Pein GmbH

Street:

Schusterring 35

Zip-Code / Town

25355 Barmstedt

Contact for technical Information:

+49 (0) 41 23 / 92 28 0

Phone / Fax / E-Mail

+49 (0) 41 23 / 9228 0 / +49 4123 922 849 / info@wp-dental.de

Emergency Information (24 hours)

Dr. Wolfgang Willmann

Phone: +49 (0) 170 405 30 52

2. Hazard Identification

Hazard-Denotation







F Inflammable

Special Hazard-Indications for Human and Environment:

The product is to be labelled due to the analysis of the "General rating principles for preparations in EC" in last modified version.

Effects narcotically.

R 11 Inflammable.

R 36 Irritating to eyes.

R 67 Steams could cause sleepiness and obnubilation.

Classification-System:

The classification is equal to the actual EC-lists, but is supplemented with data of technical literature and data of the company.

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3. Composition/Information on Ingredients

Chemical characterization

Description: Isolating material based on 2-Butanon

Hazardous Ingredients:			
CAS: 78-93-3	2-Butanon	Xi, F; R 11-36-66-67	75-90%
EINECS: 201-159-0			

Additional Indications:

The accent of the mentioned risk-advices is to see at chapter 16.

4. First-Aid-Measures

After Inhalation:

supply fresh air, in case of disorders contact physician.

After skin contact:

Generally the product is not skin-irritating

After eye contact:

Rinse with plenty of water while eyes are opened. In case of continuing disorders contact a physician.

After swallowing:

Avoid vomitting, immediately contact a physician.

5. Fire-Fighting-Measures

Suitable extinguishing media:

CO₂, dry powder or water spray. Combat large fires with waterspray-stream or with alcoholresistant foam.

For safety reasons not suitable extinguishing media:

Full water-stream

Spezial hazard caused by the substance, it's buring products or accuring gases:

At heating or in case of fire the building of toxic-gases is possible. Carbon monoxide (CO)

Special protective equipment:

No special equipment required.

6. Accidental release measures

Personal precautions:

Wear protective equipment. Keep exposed persons away.

Environmental preautions:

Avoid diffusion into sewerage and cellars.

Methods for cleaning/asorption:

Pick up with liquid-binding material (for ex. Sand, diatomaceous earth, universal-binding material, saw-dust).

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Additional Advice:

No release of hazardous goods.

7. Handling and Storage

Handling:

Indications for safety handling:

Keep container tightly closed.

Indications for fire- and explosion-prevention:

Keep source of ignitions away - do not smoke.

Storing:

Demands to stockrooms and containers:

Store at a cool place.

Indications for combined-storage:

Not required.

Further details for storage-conditions:

Store tightly closed container in a cool and dry place.

8. Exposure Controls/Personal Protection

Additional advice for composition of technical constructions:

Not further details, see point 7.

Constituent parts with working-place oriented, to be controlled limit values:			
78-93-3 2-Butanon			
MAK	600 mg/m3, 200 ml/m3		
	H, Y; DFG		

Additional advice:

At preparation valid lists are based.

Personal protective:

General protection- and hygenic measures:

Store away from foods, drinks and feeding stuff. Take off dirty, moisted clothes immediately. Wash hands before pauses and after work. Avoid contact with eyes. Avoid contact with eyes and skin.

Breath protection:

Not required

Hand-protection:

The protection-glove-material has to be impermable and resistant against the product/material/preparation. The choice of the protection-glove-material has to be adhered to the penetration-time/permeation-time and the degradation.

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Protection-glove-material:

The choice of a proper protection is not only dependant of the material but also of further attributes and different from manufacturer to manufacturer. Because the product is a mixture of several materials the constancy of the protection-glove-material is not predictable and must be proofed before using.

Penetration-time of the Protection-Glove-Material:

The exact penetration-time is to be known from the manufacturer and to be adhered.

For permanent contact in application areas without raised risk of injury (f. ex. laboratory) protection-gloves out of following materials are dedicated:

Butyl rubber

Fluor rubber (Viton)

Nitril rubber

Chloroprene rubber

Protection-gloves made of neoprene.

For permanent contact of maximal 15 minutes Protection-Gloves out of the following Materials are practible:

natural rubber (latex)

Eye-protection:

Goggles are advised.

Body-protection:

Slightly protection-wear.

9. Physical and chemical Properties

Appearance:

Form: Liquid on inert base

Colour: Colourless Odour: Typical

Safety relevant data:

Melting point/area: Not defined

Boiling point/area: 79°C **Flashpoint:** -4°C **Ignition point:** >500°C

Self-inflammable: The product is not self-inflammable.

Explosion-risk: The product is not explosive, but a building of explosion-risk

steams/air-mixtures is possible.

Explosion-limit:

Lower: 1,8 Vol %
Upper: 11,5 Vol%
Vapour-pressure at 20°C: 101 hPa
Density at 20°C: 0,86 g/cm³

Solubility/miscibility

with water: not or rather sparse miscible

Contents of solubilites:

Organic solubility: 85,0%

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Solid-body-contents: 15,0%

10. Stability and Reactivity

Conditions to avoid:

No decomposition if used and stored conventionally.

Hazardous reactions:

No hazardous reactions known.

Hazardous decomposition-products:

None

11. Toxicological information

Acute toxicity:

Primary irritation:

At skin: No irritation At eyes: Irritating

Sensitization: No sensitization affect known.

Kinetic of the toxic reaction:

According the new Material Safety Data Sheet according to REACH, specifications about kinetic of the toxic reaction, metabolism of the substance and allocation of the substance in the human body must be mentioned at this place. Data for this is not available.

Experience of the practice:

No data existing

Further detail:

The product is to be handled with the usual care when handling chemicals. The product is to be labelled.

Additional toxicological advices:

Based on the Analysis of the broadly categorization-rules of the EC for compositions in final valid version the products features following dangers:

Irritating

12. Ecological information

General data:

Water-hazardous-class (calculated accord. VwVwS): Slightly water-dangerous Do not attain into ground-water, water-bodies or sewer-sytem if not undilated.

Ecotoxic effects:

Fish toxicity: no data existing
Water organism: no data existing
Daphnia toxicity: no data existing
Mobility: no data existing

Further details to ecology:

Do not allow product to reach ground water or sewage system.

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Bioakkumulation potential:

No data available

Effect of the determination of the PTB- and vPvB-Report:

Endocrine disruption potential

If the material causes hormonal effects or prevents them is unknown.

13. Disposal considerations

Product:

Recommendation:

Dont dispose together with domestic-waste. Do not drain into sewer-system.

Diosposal key according to AVV Regulation

European Waste Catalogue			
18 01 06	Chemicals, made of, or consisting hazardous materials		

Uncleaned Packagings:

Recommendation: Dispose according to the offical rules.

Packagings:

Packages that are not contaminated can be recycled

14. Transport informations/rules

Land transport ADR/RID

Classification

Class: - (no hazardous material in terms of transport rules)

UN-Number: -Classification code: -

Description of the good: LiWa Iso Step 1

Hazard cause: - Packaging

Packaging group: not applicable, because it is only sold in very small quantities, (Bottle of 10ml)

Hazard sheet: not applicable

Limited Quantities: no information

Maritime transport IMDG/GGVSea

Classification IMDG-Code: - UN-Number: -

EmS:

Marine Pollutant: No

Description of the good: LiWa Iso Step 1

Hazard cause: - Packaging

Packaging group: not applicable, because it is only sold in very small quantities (Bottle of 10ml)

Hazard sheet: not applicable

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Air transport ICAO-TI and IATA-DGR

Classification

Class: -

UN-Number: -

Description of the good: LiWa Iso Step 1

Hazard cause: - Packaging

Packaging group: not applicable, because it is only sold in very small quantities (Bottle of 10ml)

Hazard sheet: not applicable

No dangerous transport-good in terms of the transport-rules:

Keep away from food and stimulants.

15. Regulatory Information

Marking according to EC-Rules:

The product has to be labelled and marked according to the EC-Rules/GefStoffV

Code letter and hazard-denotation:

Xi Irritating

F Inflammable

R-Phrases:

- 11 Inflammabale.
- **36** Irritating to eyes.
- 67 Steams could cause sleepiness and obnubilation.

S-Phrases:

- **9** Store container at a good aerated place
- **16** Store away from ignition source Do not smoke.
- 26 If contacted with eyes rinse immediately with plenty of water and contact a physician.
- 33 Arrange measures against electrostatical charge.
- 43 For erasure use Sand, carbon dioxide or dry-powder, dont use water

National Rules:

Technical Direction Air:

class	contingent %
III	75-90

Water-Hazardous-Class: WGK 1 (categorization per list: VwVwS): Slightly water dangerous.

16. Other information

Relevant S-Phrases

- 11 Inflammable.
- **36** Irritation to eyes.
- **66** Repeatedly contact could cause prudish and fissured skin.
- **67** Steams could cause sleepiness and obnubilation.

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Further applicable EG Guidelines

Guideline for preparation (1999/45/EC), at last changed by the guideline 2006/8/EC. Substance Guideline (67/548/EWG), at last changed by the guideline 2006/121 EC. REACH-Guideline (EC) No. 1907/2006

Manufacturer's suggested application restriction:

For use of dental technicians only

Department issuing MSDS:

Dr. Wolfgang Willmann (Phone: +49 (0) 41 23 – 9228 0)

Additional Information:

Origin: 1 http://www.baua.de

² http://www.arbeitssicherheit.de

Changes compared to the last version

Assimilation according REACH-Regulation (EC) No. 1907/2006

Some of the information presented and conclusions drawn herein are from sources other than direct test-data on the product itself.

The contents and format of this MSDS are in accordance with EEC Commission (EC) No. 1907 / 2006.

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For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Safety Data Sheet certificating division

technical department

Contact person:

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