

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

SECTION 01: Identification of the substance/mixture and of the company undertaking

- **1.1 Product identifier**
- *Trade name:*
ALPOLAN UNIVERSALGRUND 2420-00
- Article number / Safety Data Sheet:
242000
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- Application of the substance / the preparation
Coating material
- **1.3 Details of the supplier of the safety data sheet**
- *Manufacturer/Supplier:*
Teknos Feyco AG
Industriestrasse 3
LI-9487 Gamprin-Bendern
T +423 375 94 00
F +423 375 94 99
- *Further information obtainable from:*
Product safety department.
e-mail address: li-sdb@teknos.com
- **1.4 Emergency telephone number:**
Swiss Toxicological Information Centre
Emergency telephone: +41 (0)44 251 51 51

SECTION 02: Hazards identification

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



GHS02

Flam. Liq. 2 - H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 - H319 Causes serious eye irritation.
STOT SE 3 - H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms



GHS02



GHS07

- Signal word
Danger
- Hazard-determining components of labelling:
n-butyl acetate / ethyl acetate / Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cyclenes / butan-1-ol
- Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

(continued on page 2)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 1)

- Precautionary statements
 - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P233 Keep container tightly closed.
 - P240 Ground/bond container and receiving equipment.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 - P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.
- **2.3 Other hazards**
- Results of PBT and vPvB assessment
- PBT:
 - Not applicable.
- vPvB:
 - Not applicable.

SECTION 03: Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**
- Description:
 - Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

CAS Number		%
112-07-2	2-butoxyethyl acetate EC number: 203-933-3 Record number 01-2119475112-47 ⚠ Acute Tox. 4 - H312, Acute Tox. 4 - H332	1,00- 5,00
141-78-6	ethyl acetate EC number: 205-500-4 Record number 01-2119475103-46 ⚠ Flam. Liq. 2 - H225; ⚠ Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H336	10,00- 15,00
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cyclenes EC number: 920-750-0 Record number 01-2119473851-33 ⚠ Flam. Liq. 2 - H225; ⚠ Asp. Tox. 1 - H304; ⚠ STOT SE 3 - H336; ⚠ Aquatic Chronic 2 - H411	1,00- 5,00
123-86-4	n-butyl acetate EC number: 204-658-1 Record number 01-2119485493-29 ⚠ Flam. Liq. 3 - H226; ⚠ STOT SE 3 - H336	25,00- 40,00
71-36-3	butan-1-ol EC number: 200-751-6 Record number 01-2119484630-38 ⚠ Eye Dam. 1 - H318; ⚠ Flam. Liq. 3 - H226; ⚠ Acute Tox. 4 - H302, Skin Irrit. 2 - H315, STOT SE 3 - H335-H336	0,50- 1,00
1330-20-7	xylene EC number: 215-535-7 Record number 01-2119488216-32 ⚠ Flam. Liq. 3 - H226; ⚠ Acute Tox.	1,00- 5,00

(continued on page 3)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 2)

100-41-4

4 - H312, Acute Tox. 4 - H332, Skin Irrit. 2

- H315

ethylbenzene

0,50- 1,00

EC number: 202-849-4

Record number 01-2119489370-35

☞ Flam. Liq. 2 - H225; ☞ STOT RE 2 -

H373, Asp. Tox. 1 - H304; ☠ Acute Tox. 4

- H332

SECTION 04: First aid measures

- 4.1 Description of first aid measures
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
 - 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
No further relevant information available.

SECTION 05: Firefighting measures

- 5.1 Extinguishing media
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
- 5.2 Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters
- **Protective equipment:**
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 06: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- 6.2 Environmental precautions:
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- 6.4 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.

SF

(continued on page 4)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 3)

SECTION 07: Handling and storage

- **Handling:**
- **7.1 Precautions for safe handling**
Take note of emission threshold.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**
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 receptacles:**
Store in a cool location.
Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)**
No further relevant information available.

SECTION 08: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

112-07-2	2-butoxyethyl acetate		
HTP			
	Short-term value	330	mg/m3
		50	ppm
	Long-term value	130	mg/m3
		20	ppm
	iho		
141-78-6	ethyl acetate		
HTP			
	Short-term value	1800	mg/m3
		500	ppm
	Long-term value	1100	mg/m3
		300	ppm
123-86-4	n-butyl acetate		
HTP			
	Short-term value	960	mg/m3
		200	ppm
	Long-term value	720	mg/m3
		150	ppm
71-36-3	butan-1-ol		
HTP			
	Short-term value	230	mg/m3
		75	ppm
	Long-term value	150	mg/m3
		50	ppm
	iho		
1330-20-7	xylene		
HTP			

(continued on page 5)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00*(continued of page 4)*

Short-term value	440	mg/m3
	100	ppm
Long-term value	220	mg/m3
	50	ppm
iho		
100-41-4 ethylbenzene		
HTP		
Short-term value	880	mg/m3
	200	ppm
Long-term value	220	mg/m3
	50	ppm
iho		

- Ingredients with biological limit values:

1330-20-7 xylene**BNV****5,0 µmol/l****virtsan****Työvuoron päätyttyä****metyylihippuurihappo****100-41-4 ethylbenzene****BNV****5,2 mmol/l****virtsan****Työvuoron päätyttyä työviikon tai altistumisjakson loputtua****mantelihappo**

- **Additional information:**

The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not eat or drink while working.

Be sure to clean skin thoroughly after work and before breaks.

- **Respiratory protection:** Suitable respiratory protective device recommended.

- **Protection of hands:** 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 Impervious gloves

- **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- **Eye protection:** Safety glasses Tightly sealed goggles

- **Body protection:** Protective work clothing

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Appearance:

Form: Liquid

Colour: According to product specifica

(continued on page 6)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 5)

Odour:	Characteristic Characteristic				
Odour threshold:	Not determined.				
Change in condition					
Boiling point/Boiling range:	77 °C				
Flash point:	-1 °C c.c.				
Flammability (solid, gaseous):	Not applicable.				
Ignition temperature:	201 °C				
Decomposition temperature:	Not determined.				
Self-igniting:	Not determined.				
Danger of explosion:	Not determined.				
Explosion limits:					
Lower:	1 Vol %				
Upper:	11 Vol %				
Vapour pressure:	at 20 °C	10,7000 mbar	at 50 °C	55,0000 mbar	
Density:	0,9700 g/cm3				
Solubility in / Miscibility with water:					
Not determined.					
Viscosity:					
Not determined.					
at 20 °C 12 - 16 s DIN 4 mm					
9.2 Other information					
No further relevant information available.					

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- LD/LC50 values relevant for classification:
 - 112-07-2 2-butoxyethyl acetate**
Oral, LD50: 2400 mg/kg (rat)
Dermal, LD50: 1580 mg/kg (Rabbit)
 - 141-78-6 ethyl acetate**
Oral, LD50: 5620 mg/kg (Rabbit)
Inhalative, LC50/4h: 1600 mg/l (rat)
 - 123-86-4 n-butyl acetate**
Oral, LD50: 13100 mg/kg (rat)
Dermal, LD50: >5000 mg/kg (Rabbit)
Inhalative, LC50/4h: >21,0 mg/l (rat)
 - 71-36-3 butan-1-ol**
Oral, LD50: 790 mg/kg (rat)
Dermal, LD50: 3400 mg/kg (Rabbit)

(continued on page 7)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 6)

Inhalative, LC50/4h: 8000 mg/l (rat)

1330-20-7 xylene

Oral, LD50: 4300 mg/kg (rat)

Dermal, LD50: 2000 mg/kg (Rabbit)

100-41-4 ethylbenzene

Oral, LD50: 3500 mg/kg (rat)

Dermal, LD50: 17800 mg/kg (Rabbit)

• **Primary irritant effect:**

• on the skin:

No irritant effect.

• on the eye:

No irritating effect.

• **Sensitization:**

No sensitising effects known.

SECTION 12: Ecological information

• **12.1 Toxicity**

• Aquatic toxicity:

No further relevant information available.

• **12.2 Persistence and degradability**

No further relevant information available.

• **Behaviour in environmental systems:**

• **12.3 Bioaccumulative potential**

No further relevant information available.

• **12.4 Mobility in soil**

No further relevant information available.

• **Ecotoxicological effects:**

• **Remark:**

Harmful to fish

• **Additional ecological information:**

• **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

• **12.5 Results of PBT and vPvB assessment**

• **PBT:**

Not applicable.

• **vPvB:**

Not applicable.

• **12.6 Other adverse effects**

No further relevant information available.

SECTION 13: Disposal considerations

• **13.1 Waste treatment methods**

• **European and swiss waste code**

08

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

08 01

wastes from MFSU and removal of paint and varnish

08 01 11

waste paint and varnish containing organic solvents or other hazardous substances

• **Uncleaned packaging:**

• **Recommendation:**

Disposal must be made according to official regulations.

SF

(continued on page 8)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

(continued of page 7)

SECTION 14: Transport information• **14.1 UN-Number****ADR** UN1263**IMDG** UN1263**IATA** UN1263• **14.2 UN proper shipping name****ADR** 1263 PAINT**IMDG** PAINT**IATA** PAINT• **14.3 Transport hazard class(es)****ADR****Class** 3 Flammable liquids.**Label**

3

**IMDG****Class** 3 Flammable liquids.**Label**

3

**IATA****Class** 3 Flammable liquids.**Label**

3

• **14.4 Packing group****ADR** II**IMDG** II**IATA** II• **14.5 Environmental hazards:**

Not applicable.

• **14.6 Special precautions for user**

Warning: Flammable liquids.

Danger code (Kemler): 33**EMS Number:** F-E,S-E• **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

• **Transport/Additional information:**

Not applicable.

Excepted quantities (EQ): E2**Limited quantities (LQ)** 5L**Transport category** 2**Tunnel restriction code** D/E**IMDG****Limited quantities (LQ)** 5L

(continued on page 9)

according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

Exempted quantities (EQ)

E2

(continued of page 8)

- **UN "Model Regulation":**
UN 1263 PAINT, 3, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII**
Conditions of restriction: 3
- **National regulations:**
- **Classification according to VbF:**
AI
- **Technical instructions (air):**
- **Class Share in %**

III	40, 22
II	3, 52
- **Waterhazard class:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:**
A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Relevant phrases**

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
- **Department issuing MSDS:**
Environment protection department.
- **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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
GHS: Globally Harmonised 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)
VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

(continued on page 10)

MATERIAL SAFETY DATA SHEET



according to 1907/2006/EC, Article 31

4069202

Reviewed on: 17.11.2018

Printing date: 17.11.2018

PRODUCT : ALPOLAN UNIVERSALGRUND 2420-00

- * Data compared to the previous version altered.

(continued of page 9)