

according to 1907/2006/EC, Article 31

3424008

Reviewed on: 28/06/2021

Printing date: 30/06/2021

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

• 1.1 Product identifier

- *Trade name:*
ALPOLAN DUOSCAN 5483
- Article number / Safety Data Sheet:
103000
- *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 AG
* Industriestrasse 7
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, CH-8032 Zürich Emergency telephone: +41 (0)44 251 51 51 (International)

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 / 4-methylpentan-2-one
- 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.
EUH208 Contains BENZOTRIAZOL DERIVATIVES Index no. 607-176-00-3. May produce an allergic reaction.

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- 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 and bond container and receiving equipment.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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		%
108-10-1	4-methylpentan-2-one EC number: 203-550-1 Record number 01-2119473980-30 ⚠ Flam. Liq. 2 - H225; ⚠ Acute Tox. 4 - H332, Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H335	5,00- 10,00
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
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	15,00- 25,00
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	10,00- 15,00
	BENZOTRIAZOL DERIVATIVES Index no. 607-176-00-3 EC number: 400-830-7 Record number 01-0000015075-76 ⚠ Skin Sens. 1 - H317; ⚠ Aquatic Chronic 2 - H411	0,00- 0,50
1330-20-7	xylene EC number: 215-535-7	1,00- 5,00

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	Record number 01-2119488216-32 ⚠ Flam. Liq. 3 - H226; ⚠ Acute Tox. 4 - H312, Acute Tox. 4 - H332, Skin Irrit. 2 - H315	
107-98-2	1-methoxy-2-propanol EC number: 203-539-1 Record number 01-2119457435-35 ⚠ Flam. Liq. 3 - H226; ⚠ STOT SE 3 - H336	0,50- 1,00
100-41-4	ethylbenzene 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	0,00- 0,50
108-88-3	toluene EC number: 203-625-9 Record number 01-2119471310-51 ⚠ Flam. Liq. 2 - H225; ⚠ Repr. 2 - H361d, STOT RE 2 - H373, Asp. Tox. 1 - H304; ⚠ Skin Irrit. 2 - H315, STOT SE 3 - H336	1,00- 5,00
78-83-1	butanol EC number: 201-148-0 Record number 01-2119484609-23 ⚠ Eye Dam. 1 - H318; ⚠ Flam. Liq. 3 - H226; ⚠ Skin Irrit. 2 - H315, STOT SE 3 - H335-H336	0,00- 0,50
67-63-0	propan-2-ol EC number: 200-661-7 Record number 01-2119457558-25 ⚠ Flam. Liq. 2 - H225; ⚠ Eye Irrit. 2 - H319, STOT SE 3 - H336	0,50- 1,00

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. Then consult a doctor.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **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.

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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.

SECTION 07: Handling and storage

- **Handling:**
- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
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.

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PRODUCT : ALPOLAN DUOSCAN 5483*(continued of page 4)***SECTION 08: Exposure controls/personal protection**

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

108-10-1 4-methylpentan-2-one

WEL

Short-term value	416	mg/m3
	100	ppm
Long-term value	208	mg/m3
	50	ppm

Sk, BMGV

123-86-4 n-butyl acetate

WEL

Short-term value	966	mg/m3
	200	ppm
Long-term value	724	mg/m3
	150	ppm

141-78-6 ethyl acetate

WEL

Short-term value	1468	mg/m3
	400	ppm
Long-term value	734	mg/m3
	200	ppm

1330-20-7 xylene

WEL

Short-term value	441	mg/m3
	100	ppm
Long-term value	220	mg/m3
	50	ppm

Sk; BMGV

107-98-2 1-methoxy-2-propanol

WEL

Short-term value	560	mg/m3
	150	ppm
Long-term value	375	mg/m3
	100	ppm

Sk

100-41-4 ethylbenzene

WEL

Short-term value	552	mg/m3
	125	ppm
Long-term value	441	mg/m3
	100	ppm

Sk

108-88-3 toluene

WEL

Short-term value	384	mg/m3
	100	ppm
Long-term value	191	mg/m3
	50	ppm

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Sk			
78-83-1	butanol		
WEL			
	Short-term value	231	mg/m3
		75	ppm
	Long-term value	154	mg/m3
		50	ppm
67-63-0	propan-2-ol		
WEL			
	Short-term value	1250	mg/m3
		500	ppm
	Long-term value	999	mg/m3
		400	ppm

- Ingredients with biological limit values:

108-10-1 **4-methylpentan-2-one**

BMGV

20 µmol/L

Medium: urine

Sampling time: post shift

Parameter: 4-methylpentan-2-one

1330-20-7 **xylene**

BMGV

650 mmol/mol creatinine

Medium: urine

Sampling time: post shift

Parameter: methyl hippuric acid

- *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.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
Be sure to clean skin thoroughly after work and before breaks.
- *Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. 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 Protective gloves 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*

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SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Appearance:

Form:	Liquid
Colour:	According to product specifica
Odour:	Characteristic Characteristic
Odour threshold:	Not determined.

Change in condition

Initial boiling point and boiling range:	77 °C
Flash point:	-1 °C
Flammability (solid, gas):	Not applicable.
Ignition temperature:	201 °C
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	11 Vol %
Vapour pressure:	at 20 °C 8,0000 mbar at 50 °C 55,0000 mbar
Density:	0,9000 g/cm3
Solubility in / Miscibility with water:	Not determined.
Viscosity:	
.	Not determined.
.	at 23 °C 30 - 35 s
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
No further relevant information available.
- **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:**
108-10-1 4-methylpentan-2-one

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Oral, LD50: 2080 mg/kg (rat) Dermal, LD50: 16000 mg/kg (Rabbit) Inhalative, LC50/4h: 8,3-16,6 mg/l (rat) Oral, LD50: 13100 mg/kg (rat) Dermal, LD50: >5000 mg/kg (Rabbit) Inhalative, LC50/4h: >21 mg/l (rat) Oral, LD50: 5620 mg/kg (Rabbit) Inhalative, LC50/4h: 1600 mg/l (rat) Oral, LD50: 4300 mg/kg (rat) Dermal, LD50: 2000 mg/kg (Rabbit) Oral, LD50: 5660 mg/kg (rat) Dermal, LD50: 13000 mg/kg (Rabbit) Inhalative, LC50/4h: 6 mg/l (rat) Oral, LD50: 3500 mg/kg (rat) Dermal, LD50: 17800 mg/kg (Rabbit) Oral, LD50: 10000 mg/kg (rat) Oral, LD50: 5000 mg/kg (rat) Dermal, LD50: 12124 mg/kg (Rabbit) Inhalative, LC50/4h: 5320 mg/l (mouse) Oral, LD50: 2460 mg/kg (rat) Dermal, LD50: 3400 mg/kg (Rabbit) Oral, LD50: 5045 mg/kg (rat) Dermal, LD50: 12800 mg/kg (Rabbit) Inhalative, LC50/4h: 30 mg/l (rat)

123-86-4	n-butyl acetate
141-78-6	ethyl acetate
1330-20-7	xylene
107-98-2	1-methoxy-2-propanol
100-41-4	ethylbenzene
7631-86-9	silicon dioxide, chemically prepared
108-88-3	toluene
78-83-1	butanol
67-63-0	propan-2-ol

- **Primary irritant effect:**

- Skin corrosion/irritation

No irritant effect.

- Serious eye damage/irritation

Irritating effect.

- *Respiratory or skin sensitisation*

No sensitising effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

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:**
Harmful to aquatic organisms
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:**
Not applicable.
- **vPvB:**
Not applicable.
- **12.6 Other adverse effects**
No further relevant information available.

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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.

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

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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

Excepted quantities (EQ) E2

- **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, 40, 48

- **National regulations:**

- **Classification according to VbF:**

-

- **Technical instructions (air):**

- **Class Share in %**

III 46, 24

II 4, 11

- **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.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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.

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H361d	Suspected of damaging the unborn child.
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

- * Data compared to the previous version altered.