SCAN DRY PLUS



SAFETY DATA SHEET

according to Regulation (EU) 2015/830

ENGLISH TRANSLATION OF GERMAN SDS

ISSUE DATE: 20.03.2017 **REVISION DATE: 01.04.2020** SUPERSEDES DATE: 20.03.2017

VERSION: 1.1

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

1.1. **Product identifier**

Trade name Scan dry plus **Product code** 500525 **SDS Number** 163

Professional use Product use

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

Relevant identified uses

Use of the substance/mixture Matting agent for the optical impression in dental CAD / CAM process

For medical use

No additional information available. Uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier

Dentaco GmbH & Co.KG Max-Keith-Str. 46 45136 Essen Deutschland

Tel.: +49 (0) 201/8098290 Fax: +49 (0) 201/80982999

Internet: www.dentaco.de; info@dentaco.de

E-Mail: HSE@rle.de

1.4. **Emergency telephone number**

+ 49 (0) 201/ 8098290 (Mo. - Fr. 09:00 - 17:00)

2. **SECTION 2: Hazards identification**

Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008

Aerosol, Category 3 H229 Physical hazards Pressurised container: May burst if heated. **Health hazards** May cause drowsiness or dizziness.

effects.

Specific target organ toxicity — Single H336 exposure, Category 3, Narcosis

Environmental Hazardous to the aquatic environment — H412 Harmful to aquatic life with long lasting

hazards Chronic Hazard, Category 3

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms

Signal word Warning **Contains** pentane

Hazard statements

H229 Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P251 Do not pierce or burn, even after use.
P273 Avoid release to the environment.

Response

P312 Call a POISON CENTRE or doctor if you feel unwell.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Supplemental hazard information

Extra phrases For professional users only.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

3. SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
1,1,1,2,3,3,3- heptafluoropropane	431-89-0 207-079-2 01-2119485489-18- XXXX	70 - < 100	Press. Gas (Diss.), H280	
pentane	109-66-0 203-692-4 601-006-00-1 01-2119459286-30- XXXX	5 – < 10	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	(Note C)

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

#: substance with a Community workplace exposure limit

Full text of H-statements: see section 16

4. SECTION 4: First aid measures

4.1. Description of first aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take

precautions to protect themselves. Call a poison center or a doctor if you feel

unwell.

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

Skin contact: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical

advice/attention.

Eyes contact Rinse immediately with plenty of water. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention. Rinse eyes with water as a precaution.

Immediately call a POISON CENTER/doctor. Do not induce vomiting. Rinse Ingestion

mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: Direct contact with eyes may cause temporary irritation. May cause drowsiness

or dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

5. **SECTION 5: Firefighting measures**

5.1. **Extinguishing media**

Suitable extinguishing media Adapt extinguishing media to the environment. The product irself does not burn.

Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Explosion hazard Pressurised container: May burst if heated. Reactivity in case of fire In the event of fire hazardous gases may occur. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Hazardous combustion products

5.3. Advice for firefighters

Firefighting instructions Move container from fire area if it can be done without risk. Use water spray or

fog for cooling exposed containers.

Protection during firefighting Self-contained breathing apparatus and full protective clothing must be worn in

> case of fire. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

Other information Use standard firefighting procedures and consider the hazards of other involved

materials.

6. **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

General measures Do not handle until all safety precautions have been read and understood.

For non-emergency personnel

Protective equipment Use personal protective equipment as required. Wear appropriate protective

equipment and clothing during clean-up.

Emergency procedures Ventilate spillage area. Keep unnecessary personnel away. Keep people away

from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the

SDS. No open flames, no sparks, and no smoking. Avoid breathing

dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. Wear

recommended personal protective equipment. For further information refer to

section 8: "Exposure controls/personal protection".

Emergency procedures Keep unnecessary personnel away. Use personal protection recommended in

Section 8 of the MSDS.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

For containment Stop leak without risks if possible.

Methods for cleaning up Remove all sources of ignition. Stop the leak. Following product recovery, flush

area with water. Mechanically recover the product.

Other information Prevent entry into waterways, sewer, basements or confined areas. Dispose of

materials or solid residues at an authorized site.

6.4. Reference to other sections For further information refer to section 8: "Exposure controls/personal

protection". For further information refer to section 13.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Keep away from sources of ignition - No

smoking. Do not pierce or burn, even after use. Ground/bond container and receiving equipment. Avoid prolonged exposure. Avoid contact with eyes. Observe good industrial hygiene practices. Do not eat, drink or smoke when using this product. Wear appropriate personal protective equipment. Keep only in original container. Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use

only outdoors or in a well-ventilated area. Avoid breathing

dust/fume/gas/mist/vapours/spray.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after

handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Storage class (LGK) LGK 2B - Aerosols

7.3. Specific end use(s) For medical use.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

_		٠
_	ı	ı
ᆫ	Ļ	J

Regulation	Substance	Туре	Value		
COMMISSION	pentane (109-66-0)	IOELV TWA	3000 mg/m³		
DIRECTIVE 2006/15/EC	Pentane	IOELV TWA	1000 ppm		
Germany - TRGS900					
Regulation	Substance	Туре	Value		
TRGS900	pentane (109-66-0) Pentan	Occupational exposure limit value	3000 mg/m³		
		Occupational exposure limit value	1000 ppm		
		Limitation of exposure peaks	6000 mg/m³		
		Limitation of exposure peaks	2000 ppm		
		Remark	DFG;EU;Y		
DNEL: Derived no effect level					

Components	Туре	Route	Value	Form
pentane (109-66-0)	Worker	Dermal	432 mg/kg bodyweight/day	Long-term - systemic effect
. ,		Inhalation	3000 mg/m³	Long-term - systemic effec
	Consumer	Oral	214 mg/kg bodyweight/day	Long-term - systemic effec
		Inhalation	643 mg/m³	Long-term - systemic effect
		Dermal	214 mg/kg bodyweight/day	Long-term - systemic effec
PNEC: Predicted no	effect concentration			
No data available				
Components	Туре	Route	Value	Form
pentane (109-66-0)	Not applicable	Freshwater	230 µg/L	
, , , , , , , , , , , , , , , , , , , ,		Seawater	230 µg/L	
		Freshwater	880 µg/L	Intermittent release
		sediment	1.2 mg/kg dwt	Freshwater
		sediment	1.2 mg/kg dwt	Seawater
		Soil	0.55 mg/kg dwt	
		STP	3600 μg/L	
Exposure controls	;			
Appropriate enginee	ering controls	Ventilation ra	l ventilation (typically 10 air change tes should be matched to condition ocal exhaust ventilation, or other er	s. If applicable, use process
Appropriate engined		Ventilation ra enclosures, k airborne leve been establis ventilation of Personal prof	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good according to the CEN standard
		Ventilation ra enclosures, k airborne leve been establis ventilation of Personal prof	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good according to the CEN standard
Materials for protect		Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good a according to the CEN standardial protective equipment
Materials for protect	ive clothing	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good according to the CEN standard all protective equipment
Materials for protection	ive clothing	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable.	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good according to the CEN standard all protective equipment
Materials for protect Condition Individual protection Eye protection	ive clothing	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable.	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good in according to the CEN standard all protective equipment Comments e, protective glasses with side
Materials for protect Condition Individual protection Eye protection Skin protection	ive clothing	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good in according to the CEN standard all protective equipment Comments e, protective glasses with side
Materials for protect Condition Individual protection Eye protection Skin protection Hand protection	ive clothing n measures, such as pe Permeation	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec Wear approp	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good in according to the CEN standard all protective equipment Comments e, protective glasses with side
Materials for protect Condition Individual protection Eye protection Skin protection Hand protection Material	Permeation 6 (> 480 minutes)	Ventilation ra enclosures, la airborne leve been establis ventilation of Personal prof and in discus Material ersonal protec If skin or eye shield are rec Wear approp Thickness (r 0,6 Always obser handling the	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good acceptable level. Ensure good according to the CEN standard all protective equipment. Comments d or repeated skin contact es, such as washing after g, and/or smoking. Routinely
Materials for protect Condition Individual protection Eye protection Skin protection Hand protection Material Butyl rubber, Viton®	Permeation 1 6 (> 480 minutes) measures	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec Wear approp Thickness (r 0,6 Always obser handling the wash work cle	tes should be matched to condition ocal exhaust ventilation, or other ends below recommended exposure listed, maintain airborne levels to anothe work station ection equipment should be chose sion with the supplier of the person of tive equipment (PPE) contact with the product is probable sommended. Safety glasses riate protective gloves for prolongemm) Comments ve good personal hygiene measurematerial and before eating, drinking	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good acceptable level. Ensure good an according to the CEN standard all protective equipment. Comments e, protective glasses with side d or repeated skin contact es, such as washing after g, and/or smoking. Routinely remove contaminants.
Materials for protect Condition Individual protection Eye protection Skin protection Hand protection Material Butyl rubber, Viton®	Permeation 1 6 (> 480 minutes) measures	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec Wear approp Thickness (r 0,6 Always obser handling the wash work clo In case of ina	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses riate protective gloves for prolongemm) Comments ve good personal hygiene measure material and before eating, drinking othing and protective equipment to dequate ventilation wear respirator	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good acceptable level. Ensure good an according to the CEN standard all protective equipment. Comments e, protective glasses with side d or repeated skin contact es, such as washing after g, and/or smoking. Routinely remove contaminants.
Condition Individual protection Eye protection Skin protection Hand protection Material Butyl rubber, Viton® Other protective	Permeation 1 6 (> 480 minutes) measures on Filter type	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec Wear approp Thickness (r 0,6 Always obser handling the wash work clo In case of ina be	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses riate protective gloves for prolongemm) Comments ve good personal hygiene measure material and before eating, drinking othing and protective equipment to dequate ventilation wear respirator	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good an according to the CEN standard all protective equipment. Comments e, protective glasses with side d or repeated skin contact es, such as washing after g, and/or smoking. Routinely remove contaminants. by protection.
Materials for protect Condition Individual protection Eye protection Skin protection Hand protection Material Butyl rubber, Viton® Other protective Respiratory protection	Permeation I 6 (> 480 minutes) measures on Filter type	Ventilation ra enclosures, lo airborne leve been establis ventilation of Personal prot and in discus Material ersonal protec If skin or eye shield are rec Wear approp Thickness (r 0,6 Always obser handling the wash work clo In case of ina be	tes should be matched to condition ocal exhaust ventilation, or other er is below recommended exposure li hed, maintain airborne levels to an the work station ection equipment should be chose sion with the supplier of the person tive equipment (PPE) contact with the product is probable commended. Safety glasses riate protective gloves for prolongenm) Comments The good personal hygiene measurematerial and before eating, drinking othing and protective equipment to dequate ventilation wear respirator Condition	as. If applicable, use process agineering controls to maintain mits. If exposure limits have not acceptable level. Ensure good an according to the CEN standard all protective equipment. Comments e, protective glasses with side d or repeated skin contact es, such as washing after g, and/or smoking. Routinely remove contaminants. by protection. Comments

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceAerosol.Colourlight blue.OdourCharacteristic.

Odour threshold

pH

Relative evaporation rate (butylacetate=1)

Melting point

Freezing point

Boiling point

No data available

No data available

No data available

No data available

Flash point $-16~^{\circ}\mathrm{C}$ Auto-ignition temperature $260~^{\circ}\mathrm{C}$

Decomposition temperature No data available Flammability (solid, gas) Not applicable Vapour pressure 3000 - 4000 hPa Relative vapour density at 20 °C No data available Relative density No data available Density 1.295 - 1.315 g/m³ Solubility No data available Log Pow No data available No data available Viscosity, kinematic Viscosity, dynamic No data available

Explosive properties Pressurised container: May burst if heated.

Oxidising propertiesNone.Lower explosive limit (LEL)1.4 vol %Upper explosive limit (UEL)8 vol %

9.2. Other information

No additional information available.

10. SECTION 10: Stability and reactivity

10.1. Reactivity Pressurised container: May burst if heated.

10.2. Chemical stability Stable under normal conditions of use.

10.3. Possibility of hazardous reactions No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid Heat. Contact with incompatible materials. Avoid contact with hot surfaces. No

flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials Strong acids. Bases. Oxidising agents.

10.6. Hazardous decomposition products Carbon monoxide. Carbon dioxide. Hydrocarbon fragments.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified.

Skin corrosion/irritation Not classified.

Additional information Repeated exposure may cause skin dryness or cracking

 Serious eye damage/irritation
 Not classified.

 Respiratory or skin sensitisation
 Not classified.

 Germ cell mutagenicity
 Not classified

 Carcinogenicity
 Not classified

 Reproductive toxicity
 Not classified

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure Not classified
Aspiration hazard Not classified

Potential adverse human health effects

and symptoms

Occupational exposure to the substance or mixture may cause adverse effects.

12. SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute)

Substance / Product	Trophic level	Species	Type	Value	Duration	Remarks
1,1,1,2,3,3,3-	crustacea		EC50	>200 mg/l	48h	
heptafluoropropane (431-89-0)	algae		ErC50	>114 mg/l	72h	
pentane (109-66-0)	crustacea	Daphnia magna	EC50	< 10 mg/l	48h	

12.2. Persistence and degradability

pentane (109-66-0)

Persistence and degradability Readily biodegradable. (OECD 301F method).

Biodegradation 87 %

12.3. Bioaccumulative potential

1,1,1,2,3,3,3-heptafluoropropane (431-89-0)

Log Kow	2.289	
pentane (109-66-0)		
Log Pow	3.39	
Log Kow	3.45 @ 25 °C	

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Scan dry plus

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

Additional information Contains fluorinated greenhouse gases covered by the Kyoto protocol

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

•	waste treatment methods	
	Regional legislation (waste)	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
	Waste treatment methods	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with licensed collector's sorting instructions.
	Product/Packaging disposal recommendations	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
	Additional information	Dispose in accordance with all applicable regulations.

16 05 04*

gases in pressure containers (including halons) containing dangerous substances

14. **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	1950
UN-No. (IMDG)	1950
UN-No. (IATA)	1950
UN-No. (ADN)	1950
UN-No. (RID)	1950

14.2. UN proper shipping name

Proper Shipping Name (ADR)	AEROSOLS
Proper Shipping Name (IMDG)	AEROSOLS

Proper Shipping Name (IATA) Aerosols, non-flammable

Proper Shipping Name (ADN) AEROSOLS Proper Shipping Name (RID) **AEROSOLS**

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	2.2
Danger labels (ADR)	2.2

IMDG

Transport hazard class(es) (IMDG)	2.2
Danger labels (IMDG)	2.2

IATA

Transport hazard class(es) (IATA)	2.2
Hazard labels (IATA)	2.2

ADN

Transport hazard class(es) (ADN)	2.2
Danger labels (ADN)	2.2

RID

Transport hazard class(es) (RID)	2.2
Danger labels (RID)	2.2

14.4. Packing group

Packing group (ADR)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Packing group (ADN)	Not applicable
Packing group (RID)	Not applicable

14.5. Environmental hazards

Dangerous for the environment	No
Marine pollutant	No

Other information No supplementary information available.

14.6. Special precautions for user

Overland transport

Classification code (ADR) 5A

Special provisions (ADR) 190, 327, 344, 625

Limited quantities (ADR) 11

Packing instructions (ADR) P207, LP02

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 63, 190, 277, 327, 344, 959

Limited quantities (IMDG) SP277

Packing instructions (IMDG) P207, LP02

EmS-No. (Fire) F-D

EmS-No. (Spillage) S-U

Stowage category (IMDG) None

Air transport

PCA Excepted quantities (IATA) E0
PCA Limited quantities (IATA) Y203
PCA limited quantity max net quantity 30kgG

(IATA)

PCA packing instructions (IATA) 203
PCA max net quantity (IATA) 75kg
CAO packing instructions (IATA) 203
CAO max net quantity (IATA) 150kg

Special provisions (IATA) A98, A145, A167, A802

ERG code (IATA) 2L

Inland waterway transport

Classification code (ADN) 5A

Special provisions (ADN) 190, 327, 344, 625

Limited quantities (ADN) 1 L

Rail transport

Classification code (RID) 5A

Special provisions (RID) 190, 327, 344, 625

Limited quantities (RID) 1L
Packing instructions (RID) P207, LP02

Hazard identification number (RID) 20

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15. SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

Scan dry plus; pentane 3(a) Substances or mixtures fulfilling the criteria for any of the following hazard

classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13

categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard Scan dry plus; pentane

classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or

on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

3(c) Substances or mixtures fulfilling the criteria for any of the following hazard Scan dry plus; pentane

classes or categories set out in Annex I to Regulation (EC) No 1272/2008:

Hazard class 4.1

pentane 40. Substances classified as flammable gases category 1 or 2, flammable liquids

categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations

1,1,1,2,3,3,3-Heptafluoropropane (R-227ea), CAS No: 431-89-0 is exempted from the prohibition of mixtures containing fluorinated greenhouse gases in accordance with REGULATION (EU) No 517/2014 as it is used for medical applications.

National regulations

Regulatory reference WGK 2, Hazardous to water (WGK 2) (Classification according to AwSV, Annex

Hazardous Incident Ordinance (12.

BlmSchV)

Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. **SECTION 16: Other information**

Indication of changes

Section 1 - Section 16.

Abbreviations and acronyms

ribbiotiationio ana aorony	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AGW	Occupational exposure limit value
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Federal Institute for Materials Research and Testing, Germany
BAT	Maximum permissible concentration of biological working substances.
BCF	Bio-concentration factor.
BLV	Biological limit values
BLV	Biological limit values (BGW, Austria)
BMGV	Biological Monitoring Guidance Value (EH40,UK).
BOD5	Biochemical oxygen demand within 5 days
BOD	Biochemical oxygen demand
bw	Body weight.
calcd.	Calculated
CAS	Chemical Abstract Service.
CEN	European Committee for Standardization
CESIO	European Committee on Organic Surfactants and their Intermediates.
COD	Chemical oxygen demand

CLP Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification,

labeling and packaging of substances and mixtures.

CMR Carcinogenic, Mutagenic or Reproduction Toxic Substances

CSA Chemical safety assessment
CSR Chemical Safety Report.

DMEL Derived Minimum Effect Level.

DNEL Derived no effect level

EAC European waste catalogue

EC European community

EC50 Effective concentration

EINECS European Inventory of Existing Commercial Chemical Substances.

ELINCS European List of Notified Chemical Substances.

EN European norm.

ERC (Environmental Release category)

EU European Union

GLP Good Laboratory Practice.

GHS Globally Harmonized System of Classification and Labeling of Chemicals.

GW/VL Occupational exposure limit value.

GW-kw/VL-cd Occupational exposure limit value - short term.

GW-M/VL-M Occupational exposure limit value - "Ceiling".

IATA International Air Transport Association

IBC code International Bulk Chemical (Code) (International Code for the Construction and Equipment of

Ships carrying Dangerous Chemicals in Bulk).

ICAO International Civil Aviation Organization

IC50 Inhibition Concentration 50%.

IECSC Inventory of Existing Chemical Substances in China.

IMDG International Maritime Dangerous Goods ISO International Standards Organization.

IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal Concentration 50%.

LCLo Lowest published lethal concentration.

LD50 Lethal Dose 50%.

LOAEL Lowest Observed Adverse Effect Level LOEC Lowest observable effect concentration.

LOEL Lowest observable effect level.

LQ Limited quantities

TRK-Kzw Threshold limit value - Short-term exposure limit / Technical reference concentration - short-

time value, Austria.

MAK-Mow Maximum allowable workplace concentration – instantaneous value, Austria.

MAK-Tmw, TRK-Tmw Maximum allowable workplace concentration – daily mean value / Technical standard

concentration - daily mean value, Austria.

MAK Threshold limit values Germany.

MARPOL International Convention for the Prevention of Pollution from Ships.

NOAEC No-Observed Adverse Effect Concentration

NOAEL No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration

NOEL no-observed-effect level

OFCD Organisation for Economic Co-operation and Development

OEL Occupational Exposure Limits PBT Persistent Bioaccumulative Toxic PC (Chemical product PC (Chemical product category)

category)

PNEC Predicted No-Effect Concentration POCP Photochemical ozone creation potential.

POP Persistent Organic Pollutants PPF Personal protective equipment

Process category Process category

REACH Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006

concerning Registration, Evaluation Authorization and Restriction of Chemicals).

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

SCL Specific concentration limit. STFL Short-term Exposure Limit STP Sewage treatment plant SU (Sector of use) SU (Sector of use)

Substance of Very High Concern. **SVHC**

TLV Threshold Limit Value

TRGS Technical Rules for Hazardous Substances (German Standard).

TWA Time Weighted Average

UVCB Substances of Unknown or Variable composition, Complex reaction products or Biological

materials

VbF Ordinance on Flammable Liquids, Austria

VOC Volatile organic compounds

vPvB Very Persistent and Very Bioaccumulative

WEL-TWA Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted

average)reference period).

WEL-STEL Workplace Exposure Limit-Short term exposure limit (15-minute reference period).

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND

OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006...

Normal use of this product shall imply use in accordance with the instructions on Training advice

the packaging

Classification according to Regulation

(EC) No. 1272/2008

Aerosol 3 H229 STOT SE 3 H336 Aquatic Chronic 3 H412

Full text of H- and EUH-statements

Aerosol 3 Aerosol, Category 3.

Aquatic Chronic 2 Hazardous to the aquatic environment — Chronic Hazard, Category 2. Aquatic Chronic 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3.

Asp. Tox. 1 Aspiration hazard, Category 1. Flam. Liq. 1 Flammable liquids, Category 1.

Press. Gas (Diss.) Gases under pressure: Dissolved gas.

STOT SE 3 Specific target organ toxicity — Single exposure, Category 3, Narcosis.

H224	Extremely flammable liquid and vapour
H229	Pressurised container: May burst if heated
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Aerosol 3	H229	Expert judgment	
	11000	. , ,	
STOT SE 3	H336	Expert judgment	
Aquatic Chronic 3	H412	Calculation method	

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.