

P.B.H.-Kadex spray Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 24/04/2015 Revision date: 02/03/2017 Supersedes: 13/10/2015 Version: 2.0

SECTION 1: Identification of the su	ubstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: P.B.HKadex spray
Product code	: 063003
Type of product	: Aerosol.
	bstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Industrial/Professional use spec	: Industrial
	For professional use only
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safet Kommer Biopharm by	y data sheet
Handelsweg 28	
1851 NX HEILOO	
T ++ 31 (0)7 25 33 28 36 info@kommerbiopharm.nl	
0 1	
1.4. Emergency telephone number Emergency number	: Netherlands :+ 31 (0)7 25 33 28 36
SECTION 2: Hazards identification	
2.1. Classification of the substance or	
Classification apparding to Population (EC	No. 1272/2008 [CL B]
Classification according to Regulation (EC Aerosol, Category 1	H222:H229
Serious eye damage/eye irritation, Category 2	
Specific target organ toxicity — Single exposu Full text of H statements : see section 16	ire, Category 5, Narcosis 11550
Full text of H statements . see section 10	
Adverse physicochemical, human health a No additional information available 2.2. Label elements	nd environmental effects
Labelling according to Regulation (EC) No.	1272/2008 [C] B]
Hazard pictograms (CLP)	
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	GHS02 GHS07
Signal word (CLP)	: Danger
Hazardous ingredients	: propan-2-ol; isopropyl alcohol; isopropanol
Hazard statements (CLP)	: H222 - Extremely flammable aerosol.
	H229 - Pressurised container: May burst if heated.
	H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Frecautionary statements (CEF)	No smoking.
	P211 - Do not spray on an open flame or other ignition source.
	P251 - Do not pierce or burn, even after use.
	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P271 - Use only outdoors or in a well-ventilated area.
	P271 - Ose only outdoors of in a weil-ventilated area. P280 - Wear protective clothing, protective gloves, eye protection.
	P302+P352 - IF ON SKIN: Wash with plenty of water.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122
	°F.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in
	accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH208 - Contains Methyl Cedryl Ketone(32388-55-9), ethyl 2,3-epoxy-3-
	phenylbutyrate(77-83-8). May produce an allergic reaction.

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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25	40 - 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7	20 - 40	Flam. Gas 1, H220 Press. Gas (Liq.), H280
Propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (REACH-no) 01-2119486944-21	< 20	Flam. Gas 1, H220 Press. Gas (Liq.), H280
Colorant Rouge 2 BR	(CAS-No.) 85029-59-0 (EC-No.) 285-084-9	< 1	Aquatic Chronic 1, H410
Methyl Cedryl Ketone	(CAS-No.) 32388-55-9 (EC-No.) 251-020-3	< 0,5	Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
ethyl 2,3-epoxy-3-phenylbutyrate	(CAS-No.) 77-83-8 (EC-No.) 201-061-8	< 0,5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Call a POISON CENTER/doctor/physician if you feel unwell.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Call a POISON CENTER/doctor/physician if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects	: May cause drowsiness or dizziness.	
Symptoms/effects after eye contact	: Eye irritation.	
4.3. Indication of any immediate medical attention and special treatment needed		
Treat symptomatically.		

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Foam. Carbon dioxide. Water haze.	
Unsuitable extinguishing media	: Do not use a heavy water stream.	
5.2. Special hazards arising from the substant	nce or mixture	
Fire hazard	: Extremely flammable aerosol.	
Explosion hazard	: Pressurised container: May burst if heated.	
Hazardous decomposition products in case of fire	: Thermal decomposition generates : fume. Carbon dioxide. Carbon monoxide.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release me	asures
6.1. Personal precautions, protective e	equipment and emergency procedures
6.1.1. For non-emergency personnel	
	Mandilla ta angli ang ang an Mananan di ang

Emergency procedures

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for contai	nment and cleaning up
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
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, includ	ling 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.
Incompatible materials	: Direct sunlight. Heat sources. Sources of ignition.
Storage temperature	: < 50 °C
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
France - Occupational Exposure Limits		
Local name	propane-2-ol, alcool isopropylique, isopropanol	
VLE (mg/m³)	980 mg/m³	
VLE (ppm)	400 ppm	
Germany - Occupational Exposure Limits (TRGS 90	0)	
TRGS 900 Local name	2-Propanol, Isopropylalkohol, Isopropanol	
TRGS 900 Occupational exposure limit value (mg/m³)	500 mg/m³	
TRGS 900 Occupational exposure limit value (ppm)	200 ppm	
TRGS 900 Limitation of exposure peaks (mg/m³)	1000 mg/m³	
TRGS 900 Limitation of exposure peaks (ppm)	400 ppm	
butane (106-97-8)		
France - Occupational Exposure Limits		
Local name	n-Butane	
VME (mg/m³)	1900 mg/m³	
VME (ppm)	800 ppm	
United Kingdom - Occupational Exposure Limits		
Local name	Butane	
WEL TWA (mg/m³)	1450 mg/m³	
WEL TWA (ppm)	600 ppm	
WEL STEL (mg/m ³)	1810 mg/m³	
WEL STEL (ppm)	750 ppm	
Remark (WEL)	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)	

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8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

In case of repeated or prolonged contact wear gloves. The choice of appropriate gloves depends not only on the material, but also on other quality criteria that may vary from one manufacturer to another. As the product is a preparation made from several substances, glove material resistance may not be calculated in advance and must be tested before use. The exact penetration time of glove material is to be determined by the manufacturer of protective gloves and respected.

Eye protection: Safety glasses Skin and body protection: Wear suitable protective clothing Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	: red.	
Odour	: characteristic.	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: < 0 °C	
Flash point	: < 0 °C	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Extremely flammable aerosol.	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Density	: 0,799 g/cm³	
Solubility	: No data available	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: Pressurised container: May burst if heated.	
Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		
No additional information available		

SECTION 10: Stability and reactivity
10.1. Reactivity
Extremely flammable aerosol. Pressurised container: May burst if heated.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products Thermal decomposition generates : Carbon dioxide. fume. Carbon monoxide.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
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

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use.

ADN G	ΙΑΤΑ	ADN	RID
-		ADN	RID
950			
50			
	UN 1950	UN 1950	UN 1950
OLS Ae	rosols, flammable	AEROSOLS	AEROSOLS
		UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
·			
	2.1	2.1	2.1
	DSOLS, 2.1 U	DSOLS, 2.1 UN 1950 Aerosols, flammable, 2.1	DSOLS, 2.1 UN 1950 Aerosols, flammable, 2.1 UN 1950 AEROSOLS, 2.1

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according to Regulation (EC) No. 1	907/2006 (REACH) with r	ts amend	Iment Regulation (EU) 2015/830		
	2			2	
14.4. Packing group					
Not applicable	Not applicable		Not applicable	Not applicable	Not applicable
14.5. Environmental haza	ards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : N		Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information	n available				
14.6. Special precautions	for user				
Overland transport					
Classification code (ADR)		: 5F	007 044 005		
Special provisions (ADR)			327, 344, 625		
Limited quantities (ADR) Excepted quantities (ADR)		: 1I : E0			
Packing instructions (ADR)			7, LP02		
Special packing provisions (AE			7, RR6, L2		
Mixed packing provisions (ADF		: MP9			
Transport category (ADR)	()	: 2			
Special provisions for carriage	- Packages (ADR)	: V14			
Special provisions for carriage unloading and handling (ADR)		: CV9	, CV12		
Special provisions for carriage	- Operation (ADR)	: S2			
Tunnel restriction code (ADR)		: D			
Transport by sea					
Special provisions (IMDG)		: 63, 1	90, 277, 327, 344, 959		
Limited quantities (IMDG)		: SP2	77		
Excepted quantities (IMDG)		: E0			
Packing instructions (IMDG)			7, LP02		
Special packing provisions (IM	DG)	: PP8	7, L2		
EmS-No. (Fire)		: F-D			
EmS-No. (Spillage)		: S-U			
Stowage category (IMDG)		: None	9		
Air transport					
PCA Excepted quantities (IATA	4)	: E0			
PCA Limited quantities (IATA) PCA limited quantity max net c	$(1 \wedge T \wedge A)$: Y203			
PCA minited quantity max her of PCA packing instructions (IAT)		: 30kg : 203	G		
PCA max net quantity (IATA)		: 75kg			
CAO packing instructions (IAT	A)	: 203			
CAO max net quantity (IATA)	-)	: 150k	g		
Special provisions (IATA)			5, A167, A802		
ERG code (IATA)		: 10L			
Inland waterway transport					
Classification code (ADN)		: 5F			
Special provisions (ADN)		: 19, 3	827, 344, 625		
Limited quantities (ADN)		:1L			
Excepted quantities (ADN)		: E0			
Equipment required (ADN)		: PP,			
Ventilation (ADN)			1, VE04		
Number of blue cones/lights (A	(אוש)	:1			
Rail transport					
Classification code (RID) Special provisions (RID)		: 5F · 100	327, 344, 625		
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Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP02
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

France

Occupational diseases	: RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel
Germany	
Reference to AwSV	: Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: Colorant Rouge 2 BR is listed
SZW-lijst van mutagene stoffen	: Colorant Rouge 2 BR is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Class for fire hazard	: Class I-1
Store unit	: 1 liter
Classification remarks	: F+ <aerosol 1="">; Emergency management guidelines for the storage of flammable liquids must be followed</aerosol>
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product
	Pregnant/breastfeeding women working with the product must not be in direct contact with the product
15.2. Chemical safety assessment	
No chemical safety assessment has been carried out	

SECTION 16: Other information		
Full text of H- and EUH-statements:		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	

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Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Methyl Cedryl Ketone(32388-55-9), ethyl 2,3-epoxy-3-phenylbutyrate(77-83-8). May produce an allergic reaction.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.