according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 1 of 9

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

1.1. Product identifier

3020 Power Sprayable Seam Sealant K23020031AB

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

Use of the substance/mixture

Barrier (Sealant)

1.3. Details of the supplier of the safety data sheet

Company name: TUNAP GmbH & Co. KG
Street: Bürgermeister-Seidl-Str. 2
Place: D-82515 Wolfratshausen

Telephone: +49 (0) 8171/1600 - 0 Telefax: +49 (0) 8171/1600 - 40

e-mail: sdb@tunap.com Internet: www.tunap.com

1.4. Emergency telephone +49 (0) 30 30 686 790 (Giftnotruf Berlin)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Regulation (EC) No. 1272/2008

Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regulation	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
90622-57-4	-4 Hydrocarbons, C11-C12, isoalkanes, <2% aromatics				
	918-167-1		01-2119472146-39		
	Flam. Liq. 3, Asp. Tox. 1, Aquatic Chronic 4; H226 H304 H413 EUH066				
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-				
	907-495-0				
	Aquatic Chronic 3; H412				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 2 of 9

unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 3 of 9

7.1. Precautions for safe handling

Advice on safe handling

Observe instructions for use.

Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When using do not eat, drink, smoke, sniff.

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance						
DNEL type Exposure route Effect Value							
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-						
Worker DNEL,	long-term	inhalation	local	17,3 mg/m³			
Consumer DNEL, long-term		inhalation	local	8,6 mg/m³			

PNEC values

CAS No	Substance			
Environmental compartment Value				
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-			
Freshwater 0,74 mg/l				
Marine water 0,074 mg				
Soil		3714,9 mg/kg		

Additional advice on limit values

a no restriction

b End of exposure or end of shift

c at long term exposure: after several previous shifts

d before next shift

blood (B)

Urine (U)

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 4 of 9

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eve/face protection

Suitable eye protection: Tightly sealed safety glasses.

DIN EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0.45 mm

DIN EN 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)...

Filtering device with filter or ventilator filtering device of type:

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: pasty Colour: grey

Odour: characteristic

Test method

pH-Value (at 20 °C): DIN 19268

Changes in the physical state

Flash point: > 200 °C ISO 3679

Lower explosion limits: 0,4
Upper explosion limits: 7

Density (at 20 °C): 1,48 g/cm³ DIN 51757
Viscosity / dynamic: DIN 53019-1

Viscosity / kinematic: > 7 mm²/s DIN EN ISO 3104

(at 40 °C)

Flow time: DIN EN ISO 2431

(at 20 °C)

SECTION 10: Stability and reactivity

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 5 of 9

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
90622-57-4	Hydrocarbons, C11-C12, isoalkanes, <2% aromatics							
	oral	LD50 mg/kg	> 5000	Rat	Study report (1988)	OECD Guideline 401		
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1989)	OECD Guideline 402		
	inhalation (4 h) vapour	LC50	>25 mg/l	Rat				
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-							
	oral	LD50 mg/kg	> 2000	Rat	Study report (2010)	OECD Guideline 423		
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010)	OECD Guideline 402		
	inhalation (4 h) aerosol	LC50 mg/l	> 5,11	Rat	Study report (2010)	OECD Guideline 403		

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 6 of 9

Based on available data, the classification criteria are not met.

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
90622-57-4	Hydrocarbons, C11-C12, isoalkanes, <2% aromatics							
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Pseudokirchneriella subcapitata	Study report; company data (1995)	OECD Guideline 201	
	Fish toxicity	NOEC mg/l	0,209	28 d	Oncorhynchus mykiss	Company report (2010)	The aquatic toxicity was estimated by a	
	Crustacea toxicity	NOEC	> 1 mg/l	21 d	Daphnia magna	Study report; company data (2012)	OECD Guideline 211	
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-							
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Oncorhynchus mykiss	Study report (2010)	OECD Guideline 203	
	Acute algae toxicity	ErC50 mg/l	29,1	72 h	Pseudokirchneriella subcapitata	Study report (2010)	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	94,9	48 h	Daphnia magna	Study report (2010)	OECD Guideline 202	
	Crustacea toxicity	NOEC mg/l	>= 20	21 d	Daphnia magna	Study report (2014)	OECD Guideline 211	
	Acute bacteria toxicity	(> 1000 r	ng/l)	3 h	activated sludge of a predominantly domestic sewag	Study report (2010)	EU Method C.11	

12.2. Persistence and degradability

There are no data available on the mixture itself. AOX (mg/l): 0

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- und N,N'—ethane-1,2-diylbis(12-hydroxyodtadecane-1-amid) und Decanamid, N,N'-ethandiylbis-	> 6

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 7 of 9

BCF

CAS No	Chemical name	BCF	Species	Source
	Reaktionamasse aus Octadecanamid, 12-hydroxy-N-[2- [(1-oxodecyl)amino]ethyl]- und N,N' –ethane-1,2-diylbis(12-hydroxyodtadec ane-1-amid) und Decanamid, N,N'-ethandiylbis-	2,78	Lumbriculus variegatus	Study report (2015)

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available.

Further information

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

waste adhesives and sealants containing organic solvents or other hazardous substances;

hazardous waste

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

waste adhesives and sealants containing organic solvents or other hazardous substances;

hazardous waste

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); metallic packaging

Contaminated packaging

Water (with cleaning agent). Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 8 of 9

14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

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Marine pollutant:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): No information available. 2004/42/EC (VOC): No information available.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,4,10,11,14,15.

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)

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized 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)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits

according to Regulation (EC) No 1907/2006

3020 Power Sprayable Seam Sealant K23020031AB

Revision date: 04.09.2018 Product code: K23020031AB Page 9 of 9

TWA (EC): Time-Weighted Average ATE: Acute Toxicity Estimate

STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH210 Safety data sheet available on request.

Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]: 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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)