according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 1 of 11

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

1.1. Product identifier

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

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

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

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Flammable liquid and vapour.

May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates

Signal word: Warning

Pictograms:





Hazard statements

H226 Flammable liquid and vapour.H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P243 Take action to prevent static discharges.

P260 Do not breathe vapours.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P272 Contaminated work clothing should not be allowed out of the workplace.

P302+P352 IF ON SKIN: Wash with plenty of Water and soap...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

Special labelling of certain mixtures

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 2 of 11

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction.

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 (EC) No. 1272/2008 [CLP]					
64742-48-9	Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates					
	919-857-5		01-2119463258-33			
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304 EUH066					
61789-86-4	Sulfonic acids, petroleum, calcium salts					
	263-093-9		01-2119488992-18			
	Skin Sens. 1B; H317					
64742-48-9	Aliphatic solvent					
	265-150-3					
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304					

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 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

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 3 of 11

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

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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

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.

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 4 of 11

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			
61789-86-4	Sulfonic acids, petroleum, calcium salts	Sulfonic acids, petroleum, calcium salts					
Worker DNEL,	long-term	inhalation	systemic	11,75 mg/m³			
Worker DNEL, long-term		dermal	systemic	3,33 mg/kg bw/day			
Worker DNEL, long-term		dermal	local	1,03 mg/cm ²			
Consumer DNEL, long-term		inhalation	systemic	2,9 mg/m³			
Consumer DNEL, long-term		dermal	systemic	1,667 mg/kg bw/day			
Consumer DNE	EL, long-term	dermal	local	0,513 mg/cm ²			
Consumer DNEL, long-term		oral	systemic	0,833 mg/kg bw/day			
64742-48-9	Aliphatic solvent						
Consumer DNEL, long-term		oral	systemic	125 mg/kg bw/day			
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day			
Worker DNEL, long-term		dermal	systemic	208 mg/kg bw/day			
Worker DNEL, long-term		inhalation	systemic	871 mg/m³			

PNEC values

CAS No	Substance				
Environmenta	Environmental compartment				
61789-86-4	Sulfonic acids, petroleum, calcium salts				
Freshwater	1 mg/l				
Freshwater (i	10 mg/l				
Marine water	1 mg/l				
Freshwater sediment		226000000 mg/kg			
Marine sedim	226000000 mg/kg				
Secondary po	16,667 mg/kg				
Micro-organis	1000 mg/l				
Soil	271000000 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)

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 5 of 11

Urine (U)

8.2. Exposure controls

Appropriate engineering controls

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

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

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: A

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: Paste
Colour: beige
Odour: characteristic

Test method

pH-Value (at 20 °C): DIN 19268

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: 130 °C

Flash point: 40 °C ISO 3679

Flammability

Solid: not applicable
Gas: not applicable
Lower explosion limits: 0,6 vol. %
Upper explosion limits: 7 vol. %

Auto-ignition temperature

Solid: not applicable
Gas: not applicable

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 6 of 11

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

Vapour pressure: 2.1 hPa

(at 20 °C)

Density (at 20 °C): 0,83 g/cm3 DIN 51757

Water solubility: easily soluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: DIN 53019-1

Viscosity / kinematic: DIN EN ISO 3104

(at 40 °C)

Flow time: DIN EN ISO 2431

(at 20 °C)

Vapour density: not determined Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable.

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.

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 7 of 11

CAS No	Chemical name							
	Exposure route	Dose	Sp	pecies	Source	Method		
64742-48-9	Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates							
	oral	LD50 > 500 mg/kg	00 Ra	at				
	dermal	LD50 > 500 mg/kg	00 Ra	abbit				
	inhalation (4 h) vapour	LC50 4951	mg/l Ra	at				
61789-86-4	Sulfonic acids, petroleum, calcium salts							
	oral	LD50 > 160 mg/kg	000 Ra	at	Study report (1981)	other: Section 772 .112-21 CFR 40		
	dermal	LD50 > 500 mg/kg	00 Ra	abbit	Study report (1981)	OECD Guideline 402		
64742-48-9	Aliphatic solvent							
	oral	LD50 >500 mg/kg	0 Ra	at				
	dermal	LD50 >300 mg/kg	0 Ra	abbit				

Irritation and corrosivity

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

Sensitising effects

Contains Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

May cause drowsiness or dizziness. (Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

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

Specific effects in experiment on an animal

No information available.

Practical experience

Observations relevant to classification

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 8 of 11

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
64742-48-9	Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Pimephales promelas		
	Acute algae toxicity	ErC50 mg/l	> 100		Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna		
61789-86-4	4 Sulfonic acids, petroleum, calcium salts						
	Acute algae toxicity	ErC50 mg/l	> 1000		Pseudokirchneriella subcapitata	Study report (1994)	EPA OTS 797.1050
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna	Study report (1993)	EPA OTS 797.1300
	Acute bacteria toxicity	(> 10000 mg/l)			activated sludge of a predominantly domestic sewag	,	OECD Guideline 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-48-9	Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates	5
61789-86-4	Sulfonic acids, petroleum, calcium salts	> 4,46

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

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

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish

containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish

containing organic solvents or other hazardous substances; hazardous waste

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 9 of 11

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1139

14.2. UN proper shipping name: Coating solution

14.3. Transport hazard class(es): Ш 14.4. Packing group: Hazard label: 3 F1 Classification code: Special Provisions: 640F Limited quantity: 5 L Excepted quantity: E1 Transport category: Hazard No: 30 Tunnel restriction code: D/F

Inland waterways transport (ADN)

14.1. UN number: UN 1139

14.2. UN proper shipping name: Coating solution

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3Classification code:F1Special Provisions:640ELimited quantity:5 LExcepted quantity:E1

Marine transport (IMDG)

14.1. UN number: UN 1139

14.2. UN proper shipping name: Coating solution

14.3. Transport hazard class(es): 3 14.4. Packing group: Ш Hazard label: 3 Marine pollutant: No **Special Provisions:** 955 Limited quantity: 5 L Excepted quantity: E1 EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1139

14.2. UN proper shipping name: Coating solution

14.3. Transport hazard class(es): 3
14.4. Packing group: |||

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 10 of 11

Hazard label: 3
Special Provisions: A3
Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1

IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquid.

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: Hydrocarbons, C9 - C11, n-alkanes, iso-alkanes, cyclics, < 2 % aromates; Aliphatic solvent

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

Subcategory according to Directive Special finishes - All types, VOC limit value: 840 g/l

2004/42/EC:

Additional information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

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

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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 LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

according to Regulation (EC) No 1907/2006

1070 TUNTEX Hohlraumversiegelung Wachs K31070100AB

Revision date: 09.10.2018 Product code: 1400418 Page 11 of 11

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction.

Further Information

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.)