Safety Data Sheet

according to Regulation (EC) No 1907/2006

ITH-Pe Polyester Resin (ITH 165 Pe (9640072900), ITH 300 Pe (9640072940), ITH 410 Pe (9640072941)), Comp. A

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

1.1. Product identifier

ITH-Pe Polyester Resin (ITH 165 Pe (9640072900), ITH 300 Pe (9640072940), ITH 410 Pe (9640072941)), Comp. A

UFI: 6HQM-20TA-SP0K-XRYR

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

Use of the substance/mixture

Adhesive mortar for fastening elements A-component (resin)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	SORMAT Oy
Street:	Harjutie 5
Place:	FIN-21290 Rusko
Telephone:	+358 207 940 200
e-mail:	sormat@sormat.com
Internet:	www.sormat.com
Responsible Department:	Technical information: sormat@sormat.com

1.4. Emergency telephone number:

Poison Information Center and Clinical Toxicology, Mainz Tel.: +49 (0) 6131 19240 (in English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Hazard Statements:
Causes serious eye irritation.
May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Tetramethylene dimethacrylate;
Ethylene dimethacrylate;
Methacrylic acid, monoester with propane-1,2-diol

Signal word: Warning

Pictograms:

Hazard statements

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statements

P261	Avoid breathing vapours.
P272	Contaminated work clothing should not be allowed out of the workplace.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Additional advice on labelling

For distribution to the general public (consumers) additionally indicate voluntarily:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of the reach of children.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
2082-81-7	Tetramethylene dimethacrylate			10 - < 20 %
	218-218-1		01-2119967415-30	
	Skin Sens. 1B; H317			
25013-15-4	Vinyltoluene			1 - < 5 %
	246-562-2		01-2119622074-50	
	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H226 H332 H315 H319 H412			
97-90-5	Ethylene dimethacrylate			1 - < 5 %
	202-617-2	607-114-00-5	01-2119965172-38	
	Skin Sens. 1, STOT SE 3; H317 H335			
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			1 - < 5 %
	248-666-3		01-2119490226-37	
	Eye Irrit. 2, Skin Sens. 1; H319 H317			
3077-12-1	N,N-Bis-2-hydroxyethyl)-p-toluidine			< 1,5 %
	221-359-1		01-2120791684-40	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318			
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol			< 1 %
	254-075-1		01-2119980937-17	
	Acute Tox. 2, Aquatic Chronic 3; H300 H412			
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate			< 1 %
	229-934-9		01-2119451093-47	
	Repr. 2, Aquatic Chronic 3; H361d H412			
130-15-4	1,4-naphthoquinone			< 0.1 %
	204-977-6		01-2120760462-57	
	Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H330 H301 H314 H319 H317 H335 H400 H410			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

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

May cause an allergic skin reaction.
Causes serious 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.
Extinguishing powder
Water spray jet
Carbon dioxide (CO_2).

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic
Carbon monoxide

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

Additional information

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

Use personal protective equipment as required. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand
Treat the recovered material as prescribed in the section on waste disposal.
Retain contaminated washing water and dispose it.

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

Use only outdoors or in a well-ventilated area.
Wear personal protection equipment (refer to section 8).
Avoid contact with skin, eyes and clothes.
When using do not eat, drink or smoke.
Wash hands thoroughly after handling.
Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in a place accessible by authorized persons only. Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

storage temperature: 5 - 25°C

7.3. Specific end use(s)

Adhesive mortar for fastening elements A-component (resin)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2082-81-7	Tetramethylene dimethacrylate			
Worker DNEL, long-term		inhalation	systemic	14,5 mg/m³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,3 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
25013-15-4	Vinyltoluene			
Worker DNEL, long-term		inhalation	systemic	37 mg/m³
97-90-5	Ethylene dimethacrylate			
Worker DNEL, long-term		inhalation	systemic	2,45 mg/m³
Worker DNEL, long-term		dermal	systemic	1,3 mg/kg bw/day
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			
Worker DNEL, long-term		inhalation	systemic	14,7 mg/m³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,8 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate			
Worker DNEL, long-term		dermal	systemic	5 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	17,62 mg/m³
130-15-4	1,4-naphthoquinone			
Worker DNEL, long-term		inhalation	systemic	0,033 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
2082-81-7	Tetramethylene dimethacrylate	
Freshwater		0,087 mg/l
Marine water		0,0087 mg/l
Freshwater sediment		3,12 mg/kg
Marine sediment		0,312 mg/kg
Micro-organisms in sewage treatment plants (STP)		20 mg/l
Soil		0,573 mg/kg
25013-15-4	Vinyltoluene	
Marine water		0,05 mg/l
Marine water (intermittent releases)		0,002 mg/l
Freshwater sediment		3,12 mg/kg
Marine sediment		0,684 mg/kg
Soil		0,133 mg/kg
97-90-5	Ethylene dimethacrylate	
Freshwater		0,139 mg/l
Marine water		0,014 mg/l
Marine water (intermittent releases)		0,15 mg/l
Freshwater sediment		1,6 mg/kg
Marine sediment		0,16 mg/kg
Micro-organisms in sewage treatment plants (STP)		57 mg/l
Soil		0,239 mg/kg
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol	
Freshwater		0,904 mg/l
Marine water		0,904 mg/l
Freshwater sediment		6,28 mg/kg
Marine sediment		6,28 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,727 mg/kg
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate	
Freshwater		0,014 mg/l
Marine water		0,001 mg/l
Freshwater sediment		5,29 mg/kg
Marine sediment		0,529 mg/kg
Soil		1,05 mg/kg
130-15-4	1,4-naphthoquinone	
Freshwater		26,1 mg/l
Marine water		2,61 mg/l
Freshwater sediment		321 mg/kg
Marine sediment		32,1 mg/kg

Micro-organisms in sewage treatment plants (STP)	0,172 mg/l
Soil	49 mg/kg

Additional advice on limit values

This mixture includes quartz (silica) which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat, drink or smoke.

Eye/face protection

Wear safety glasses.

Hand protection

Disposable gloves
Recommended material: NBR (Nitrile rubber)
Breakthrough time: > 480 min
Thickness of the glove material: > 0,2 mm
DIN-/EN-Norms: EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste
Colour:	light beige
pH-Value:	not determined

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	1,72 g/cm³
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Response: Oxidising agent, strong

10.4. Conditions to avoid

Heat. Keep cool. Protect from sunlight.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.
ATE (oral) 8042,2 mg/kg; ATE (vapour) 265,90 mg/l; ATE (dust/mist) 36,259 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
2082-81-7	Tetramethylene dimethacrylate					
	oral	LD50 mg/kg	10066	Rat		
	dermal	LD50 mg/kg	> 3000	Rabbit		
25013-15-4	Vinyltoluene					
	dermal	LD50 mg/kg	4585	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation aerosol	ATE	1,5 mg/l			
97-90-5	Ethylene dimethacrylate					
	oral	LD50 mg/kg	8700	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol					
	oral	LD50 mg/kg	> 2000	Rat		
	dermal	LD50 mg/kg	> 5000	Rabbit		
3077-12-1	N,N-Bis-2-hydroxyethyl)-p-toluidine					
	oral	LD50 mg/kg	> 300	Rat		
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol					
	oral	LD50 mg/kg	27,5	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate					
	oral	LD50 mg/kg	3200	Rat		
	dermal	LD50 mg/kg	18900	Guinea pig		
130-15-4	1,4-naphthoquinone					
	oral	LD50	124 mg/kg	Rat		
	inhalation vapour	ATE	0,5 mg/l			
	inhalation (4 h) aerosol	LC50	0,046 mg/l	Rat		

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (Tetramethylene dimethacrylate; Ethylene dimethacrylate; Methacrylic acid, monoester with propane-1,2-diol; 1,4-naphthoquinone)

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
2082-81-7	Tetramethylene dimethacrylate					
	Crustacea toxicity	NOEC 5,09 mg/l	21 d			
	Acute bacteria toxicity	(32,5 mg/l)				
25013-15-4	Vinyltoluene					
	Acute fish toxicity	LC50 5,2 mg/l	96 h			
	Acute crustacea toxicity	EC50 9,3 mg/l	48 h	Daphnia magna (Big water flea)		
97-90-5	Ethylene dimethacrylate					
	Acute fish toxicity	LC50 15,95 mg/l	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50 17,3 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 44,9 mg/l	48 h	Daphnia magna (Big water flea)		
	Crustacea toxicity	NOEC 13,2 mg/l	2 d			
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol					
	Acute algae toxicity	ErC50 > 97,2 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 > 143 mg/l	48 h	Daphnia magna (Big water flea)		
	Algea toxicity	NOEC mg/l				
3077-12-1	N,N-Bis-2-hydroxyethyl)-p-toluidine					
	Acute fish toxicity	LC50 735 mg/l	96 h			
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol					
	Acute fish toxicity	LC50 17 mg/l	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50 245 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 28,8 mg/l	48 h	Daphnia magna (Big water flea)		
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate					
	Acute fish toxicity	LC50 23,4 mg/l	96 h			
130-15-4	1,4-naphthoquinone					
	Acute fish toxicity	LC50 0,045 mg/l	96 h	Oryzias latipes (Ricefish)		
	Acute algae toxicity	ErC50 0,011 mg/l	72 h			
	Acute crustacea toxicity	EC50 0,026 mg/l	48 h			

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2082-81-7	Tetramethylene dimethacrylate			
	OECD 310	84 %	28	
25013-15-4	Vinyltoluene			
	OECD 310	36,7 %	28	
97-90-5	Ethylene dimethacrylate			
	OECD 301D	71 %	28	
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			
	OECD 301C	81%	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2082-81-7	Tetramethylene dimethacrylate	3,1
25013-15-4	Vinyltoluene	3,35
97-90-5	Ethylene dimethacrylate	2,4
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol	0,97
3077-12-1	N,N-Bis-2-hydroxyethyl)-p-toluidine	1,09
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol	2,11
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate	4,91
130-15-4	1,4-naphthoquinone	1,77

BCF

CAS No	Chemical name	BCF	Species	Source
25013-15-4	Vinyltoluene	100 - 320		

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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

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

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.

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.

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 information available.

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

Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

VOC content: 2,8 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

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.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1.1 (UFI).

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
ErC50: EC50 in terms of reduction of growth rate
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NOEC: No Observed Effect Concentration
OECD: Oragnisation for Economic Co-operation and Development
PBT: persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail)
VOC: Volatile organic compound
Acute Tox. 3: Acute toxicity, Category 3
Acute Tox. 2: Acute toxicity, Category 2
Acute Tox. 4: Acute toxicity, Category 4
Aquatic Acute 1: Acute aquatic hazard, Category 1
Aquatic Chronic 1: Long-term aquatic hazard, Category 1
Aquatic Chronic 3: Long-term aquatic hazard, Category 3
Asp. Tox. 1: Aspiration hazard, Category 1
Eye Dam. 1: Serious eye damage/eye irritation, Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Category 2
Flam. Liq. 3: Flammable liquid, Category 3
Repr. 2: Reproductive toxicity, Category 2
Skin Corr. 1C: Skin corrosion/irritation, Category 1C
Skin Irrit. 2: Serious eye damage/eye irritation, Category 2
Skin Sens. 1A: Skin sensitilization, Category 1A
Skin Sens. 1B: Skin sensitilization, Category 1B
STOT SE 3: Specific target organ toxicity (single exposure), Category 3

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

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.)

ITH-Pe Polyester Resin (ITH 165 Pe (9640072900), ITH 300 Pe (9640072940), ITH 410 Pe (9640072941)), Comp. B

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

1.1. Product identifier

ITH-Pe Polyester Resin (ITH 165 Pe (9640072900), ITH 300 Pe (9640072940), ITH 410 Pe (9640072941)), Comp. B

UFI: 4MQM-K0GR-3P03-K3JT

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

Use of the substance/mixture

compound mortar B-component (hardener)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	SORMAT Oy
Street:	Harjutie 5
Place:	FIN-21290 Rusko
Telephone:	+358 207 940 200
e-mail:	sormat@sormat.com
Internet:	www.sormat.com
Responsible Department:	Technical information: sormat@sormat.com

1.4. Emergency telephone number:

Poison Information Center and Clinical Toxicology, Mainz Tel.: +49 (0) 6131 19240 (in English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Hazard Statements:
Causes serious eye irritation.
May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Dibenzoyl peroxide

Signal word: Warning

Pictograms:

Hazard statements

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.

Precautionary statements

P261	Avoid breathing vapours.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Additional advice on labelling

For distribution to the general public (consumers) additionally indicate voluntarily:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of the reach of children.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
94-36-0	Dibenzoyl peroxide			10 - < 15 %
	202-327-6	617-008-00-0	01-2119511472-50	
	Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H241 H319 H317 H400 H410			

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

Further Information

The product has been tested for aquatic toxicity. The tests show no need for classification of the product as toxic and harmful to aquatic life. Test reports are available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

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

May cause an allergic skin reaction.
Causes serious 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.
Extinguishing powder
Water spray jet
Carbon dioxide (CO_2).

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic
Carbon monoxide

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information

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

Use personal protective equipment as required. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up:
Sand
Treat the recovered material as prescribed in the section on waste disposal.
Retain contaminated washing water and dispose it.

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

Use only outdoors or in a well-ventilated area.
Wear personal protection equipment (refer to section 8).
Avoid contact with skin, eyes and clothes.
When using do not eat, drink or smoke.
Wash hands thoroughly after handling.
Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.
Store in a place accessible by authorized persons only.
Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Oxidising agent, strong
Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

Keep container tightly closed in a cool place.
storage temperature: 5 - 25°C

7.3. Specific end use(s)

see section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
94-36-0	Dibenzoyl peroxide	-	5		TWA (8 h)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
94-36-0	Dibenzoyl peroxide		
Consumer DNEL, long-term	oral	systemic	2 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	13,3 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	39 mg/m³

PNEC values

CAS No	Substance
Environmental compartment	Value
94-36-0	Dibenzoyl peroxide
Freshwater	0,00002 mg/l
Marine water	0,000002 mg/l
Freshwater sediment	0,013 mg/kg
Marine sediment	0,001 mg/kg

Additional advice on limit values

This mixture includes quartz (silica) which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat or drink.

Eye/face protection

Wear safety glasses.

Hand protection

Disposable gloves
Recommended material: NBR (Nitrile rubber)
Breakthrough time: > 480 min
Thickness of the glove material: > 0,2 mm
DIN-/EN-Norms: EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste
Colour:	black
Odour:	characteristic
pH-Value:	not applicable

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.
Available oxygen content (%) < 1%
no classification

Vapour pressure:	not determined
Density (at 20 °C):	1,59 g/cm³

Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

see section 10.3

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidising agent

10.4. Conditions to avoid

see section 7.2

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

Benzoic acid
Benzene
Biphenyl

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
94-36-0	Dibenzoyl peroxide				
	oral	LD50 > 5000 mg/kg	Rat		

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (Dibenzoyl peroxide)

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Further information

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.

OECD 201 (Desmodesmus subspicatus)
IC10: (0 - 72 h) = 30 mg/l
IC50: (0 - 72 h) = 150 mg/l

OECD 202 (Daphnia magna)
EC0/NOEC (48h) = 100 mg/l
EC50 (48h) = >500 mg/l
EC100 (48h) = >>500 mg/l

OECD 203 (Danio rerio)
LC0/NOEC : 250 mg/l
LC50 : > 500 mg/l
LC100 : >> 500 mg/l

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
94-36-0	Dibenzoyl peroxide					
	Acute fish toxicity	LC50 0,0602 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 0,0711 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 0,11 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Algea toxicity	NOEC 0,02 mg/l	3 d	Pseudokirchneriella subcapitata	OECD 201	
	Crustacea toxicity	NOEC 0,001 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211	
	Acute bacteria toxicity	(35 mg/l)	0,5 h		OECD 209	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
94-36-0	Dibenzoyl peroxide			
	OECD 301D	71%	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
94-36-0	Dibenzoyl peroxide	3,2

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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

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

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.

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.

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 information available.

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

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

VOC content: 4,3 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

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): 1 - slightly water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1.1 (UFI).

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
ICAO: International Civil Aviation Organization
IC50: Inhibitory concentration, 50%
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NOEC: No Observed Effect Concentration
OECD: Oragnisation for Economic Co-operation and Development
PBT: persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail)
VOC: Volatile organic compound
Aquatic Acute 1: Acute aquatic hazard, Category 1
Aquatic Chronic 1: Long-term aquatic hazard, Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Category 2
Skin Sens. 1: Skin sensitilization, Category 1
Org. Perox. B: Organic Peroxides, Type B

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

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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.)