Safety Data Sheet

according to Regulation (EC) No 1907/2006

Womi Technobond black

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

1.1. Product identifier

Womi Technobond black

Further trade names

Womi Technobond white -> 5570217
Womi Technobond grey -> 5570218

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

Use of the substance/mixture

Adhesives and sealants

1.3. Details of the supplier of the safety data sheet

Company name:	Service Best B.V.
Street:	De Schakel 60
Place:	M-5651 GH Eindhoven/ the Netherlands
Telephone:	+31 (0)40 230 2345
E-mail:	info@servicebest.com

1.4. Emergency telephone number:

+31 (0) 30 2748888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH208	Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
EUH212	Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
2768-02-7	trimethoxyvinylsilane; trimethoxy(vinyl)silane			1 - < 2,5 %
	220-449-8	014-049-00-0	01-2119513215-52	
	Flam. Liq. 3, Acute Tox. 4, Skin Sens. 1B; H226 H332 H317			
13463-67-7	titanium dioxide			< 2 %
	236-675-5		01-2119489379-17	
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			0,1 - < 1 %
	217-164-6		01-2119970215-39	
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1B, STOT RE 2; H332 H318 H317 H373			
13463-67-7	titanium dioxide (< 10 µm)			0,1 - < 1 %
	236-675-5	022-006-00-2		
	Carc. 2; H351			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2768-02-7	220-449-8	trimethoxyvinylsilane; trimethoxy(vinyl)silane	1 - < 2,5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 3158 mg/kg; oral: LD50 = > 5000 mg/kg		
13463-67-7	236-675-5	titanium dioxide	< 2 %
	inhalation: LC50 = > 6,8 mg/l (dusts or mists); oral: LD50 = > 10000 mg/kg		
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	0,1 - < 1 %
	inhalation: LC50 = 12,6 mg/l (vapours); inhalation: LC50 = 1,49 - 2,44 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2413 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If unconscious but breathing normally, place in recovery position and seek medical advice. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Take off contaminated clothing and wash it before reuse. Gently wash with plenty of soap and water. In case of skin reactions, consult a physician.

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. Protect uninjured eye.

After ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Get medical advice/attention if you feel unwell.

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

No information available.

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 (CO2), Dry extinguishing powder
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic (Carbon monoxide, Carbon dioxide (CO2))

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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

General advice

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment.

For emergency responders

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

For cleaning up

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

Other information

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and

clothes. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Keep away from: Food and feedingstuffs
Protect from direct sunlight.

Further information on storage conditions

storage temperature: < 25°C

7.3. Specific end use(s)

Adhesives and sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	50 mg/m³
Consumer DNEL, long-term		inhalation	local	0,1 mg/m³
Consumer DNEL, acute		inhalation	local	4 mg/m³
Consumer DNEL, acute		oral	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	35,5 mg/m³
Worker DNEL, long-term		dermal	systemic	5 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	0,6 mg/m³
Worker DNEL, acute		inhalation	systemic	260 mg/m³
Worker DNEL, acute		inhalation	local	5,36 mg/m³

PNEC values

CAS No	Name of agent	
Environmental compartment		Value
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
Freshwater		0,062 mg/l
Freshwater (intermittent releases)		0,62 mg/l
Marine water		0,0062 mg/l
Freshwater sediment		0,05 mg/kg
Marine sediment		0,005 mg/kg
Micro-organisms in sewage treatment plants (STP)		25 mg/l
Soil		0,009 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls






Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. (EN 166)

Hand protection

Wear suitable gloves. (EN ISO 374)

By long-term hand contact
Suitable material: Butyl caoutchouc (butyl rubber)
Thickness of the glove material: > 0,4mm
Permeation time (maximum wear duration): > 30 min.

By short-term hand contact
Suitable material: NBR (Nitrile rubber)
Thickness of the glove material: > 0,4mm
Permeation time (maximum wear duration): > 30 min.

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. 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. (EN 14387) Filter type: A-P1

Thermal hazards

No information available.

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:	solid (Paste)
Colour:	diverse
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	Non-flammable.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	practically insoluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	1,53 g/cm³
Relative vapour density:	not determined
Particle characteristics:	not determined

9.2. Other information

No information available.

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

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect against: Heat, Frost

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Pyrolysis products, toxic (Carbon monoxide Carbon dioxide (CO2))

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 441,8 mg/l; ATE (inhalation dust/mist) 60,24 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2768-02-7	trimethoxyvinylsilane; trimethoxy(vinyl)silane				
	oral	LD50 > 5000 mg/kg	Rat	Manufacturer	
	dermal	LD50 3158 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
13463-67-7	titanium dioxide				
	oral	LD50 > 10000 mg/kg	Rat	Manufacturer	
	inhalation (4 h) dust/mist	LC50 > 6,8 mg/l	Rat	Manufacturer	
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine				
	oral	LD50 2413 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	OECD 402
	inhalation (4 h) vapour	LC50 12,6 mg/l	Rat	Manufacturer	OECD 403
	inhalation (4 h) dust/mist	LC50 1,49 - 2,44 mg/l	Rat	Manufacturer	OECD 403

Irritation and corrosivity

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

Sensitising effects

Based on available data, the classification criteria are not met.
Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.
Test results: Respiratory or skin sensitisation: not sensitising. (OECD 406, OECD 429)

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: 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.

Information on likely routes of exposure

oral, dermal, inhalative, Eye contact

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of Wastes Code - 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

List of Wastes Code - 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

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID 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 or ID 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 or ID 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 or ID 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. Maritime transport in bulk according to IMO instruments

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 40, Entry 75

Directive 2010/75/EU on industrial emissions:	< 3,5 %
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D):	1 - slightly hazardous to water

Additional information

Observe in addition any national regulations!

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Flam. Liq: Flammable liquid
Acute Tox: Acute toxicity
Eye Dam: Eye damage
Skin Sens: Skin sensitisation
Carc: Carcinogenicity
STOT RE: Specific target organ toxicity - repeated exposure
CLP: Classification, Labelling and Packaging
REACh: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
EG/EWG: Europäische Gemeinschaft/Europäische Wirtschaftsgemeinschaft
EU: Europäische Union
CAS: Chemical Abstracts Service
M-Factor: Multiplication Factor
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute Toxicity Estimate
LC50: Lethal Concentration, 50%
LD50: Lethal Dose, 50%
LL50: Lethal Loading, 50%
EL50: Effect Loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-Concentration Factor
PBT: Persistent, Bioaccumulative, Toxic
vPvB: very Persistent, very Bioaccumulative
ADR: Accord européen sur le transport des marchandises Dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the International carriage of Dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
TI: Technical Instructions
DGR: Dangerous Goods Regulations
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
IE: Industrial Emissions
SVHC: Substance of Very High Concern

Key literature references and sources for data

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). (v.1.2, 2013)

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH208	Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
EUH212	Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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