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

1.1 Product identifier

Härter für Zweikomponentenspezialspachtel
Article number: TSPACHG

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

1.2.1 Relevant uses

Hardener

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Max Frank GmbH & Co. KG
Mitterweg 1
94339 Leiblfing / GERMANY
Phone +49 (0)9427 189-234
Fax +49 (0)9427 189-275
Homepage www.maxfrank.com
E-mail info@maxfrank.de

Address enquiries to

Technical information info@maxfrank.de

Safety Data Sheet sicherheitsdatenblatt@maxfrank.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Org. Perox. E: H242 Heating may cause a fire.
Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Sens. 1: H317 May cause an allergic skin reaction.
Aquatic Acute 1: H400 Very toxic to aquatic life.
Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard pictograms

Signal word

WARNING

Hazard statements

H242 Heating may cause a fire.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep away from reducing agents, heavy metal compounds, acids and alkalis.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P410 Protect from sunlight.
P411+P235 Store at temperatures not exceeding 25 °C. Keep cool.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - 50	Dibenzoyl peroxide
	CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg-No.: 01-2119511472-50-XXXX
	GHS/CLP: Org. Perox. B: H241 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M-Factor (acute): 10, M-Factor (chronic): 10

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Take off contaminated clothing and wash before reuse.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact
In case of contact with skin wash off immediately with soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used
Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Has a fire-promoting effect due to release of oxygen.

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Use personal protective clothing.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up residues with absorbent material (e.g. sand).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin. Use personal protective equipment.
Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.

Do not eat, drink, smoke or take drugs at work.
Take off contaminated clothing and wash before reuse.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store with alkalies.
Do not store together with acids.
Do not store together with food and animal food/diet.
Do not store with combustible and/or organic materials.

Keep container in a well-ventilated place.
Keep container tightly closed.
Protect from heat/overheating and from sun.
Keep in a cool place. Store in a dry place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Dibenzoyl peroxide
CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg-No.: 01-2119511472-50-XXXX
Long-term exposure: 5 mg/m³

DNEL

Substance
Dibenzoyl peroxide, CAS: 94-36-0
Industrial, dermal, Long-term - systemic effects, 13.3 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 39 mg/m³
general population, oral, Long-term - systemic effects, 2 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 2.9 mg/m³

PNEC

Substance
Dibenzoyl peroxide, CAS: 94-36-0
soil, 0.0758 mg/kg dw
sediment (seawater), 0.001 mg/kg
sediment (freshwater), 0.013 mg/kg
sewage treatment plants (STP), 0.35 mg/l
freshwater, 0.02 ug/L
seawater, 0.002 ug/L

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0.7 mm; Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	light protective clothing
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	If workplace limit values are exceeded or if there is insufficient ventilation: Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	See SECTION 6+7.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pasty
Color	white
Odor	characteristic
Odour threshold	not applicable
pH-value	4 - 5
pH-value [1%]	not determined
Boiling point [°C]	not determined
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	yes
Vapour pressure/gas pressure [kPa]	0.23
Density [g/cm³]	1.14 - 1.2 (20 °C / 68,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	partially miscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	not determined
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature	not determined
Decomposition temperature [°C]	SADT 50°C
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Heating may cause a fire.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with alcohols, amines, aqueous acids and alkalies.
Reactions with reducing agents.
As oxidizing agent, attacks organic substances such as wood, paper, fats.
Reactions with various metals.

10.4 Conditions to avoid

Warming

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Acute oral toxicity

Product
oral, Based on the available information, the classification criteria are not fulfilled.

Substance
Dibenzoyl peroxide, CAS: 94-36-0
LD50, oral, Rat, 5000 mg/kg

Acute dermal toxicity

Product
dermal, Based on the available information, the classification criteria are not fulfilled.

Acute inhalational toxicity

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.

Serious eye damage/irritation

Irritant
Based on the available information, the classification criteria are fulfilled.
Calculation method

Substance
Dibenzoyl peroxide, CAS: 94-36-0
Eye, Rabbit, In vivo study, irritant

Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Dibenzoyl peroxide, CAS: 94-36-0
dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation

Sensitizing.
Based on the available information, the classification criteria are fulfilled.
Calculation method

Substance
Dibenzoyl peroxide, CAS: 94-36-0
dermal, mouse, OECD 429, sensitising

Specific target organ toxicity — single exposure

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Substance
Dibenzoyl peroxide, CAS: 94-36-0
NOAEL, dermal, mouse, 833 mg/kg bw/day, In vivo study, no adverse effect observed
NOAEL, oral, Rat, 200 mg/kg bw/day, In vivo study, adverse effect observed

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Substance

Dibenzoyl peroxide, CAS: 94-36-0
NOAEL, oral, Rat, 300 mg/kg bw/day, OECD 414, adverse effect observed, Effects on developmental toxicity,
NOAEL, oral, Rat, 500 mg/kg bw/day, OECD 422, adverse effect observed, Effects on fertility,

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Dibenzoyl peroxide, CAS: 94-36-0
dermal, Rat, OECD 451, no adverse effect observed
oral, Rat, In vivo study, no adverse effect observed

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Dibenzoyl peroxide, CAS: 94-36-0
LC50, (96h), Oncorhynchus mykiss, 0.0602 mg/l (OECD 203)
LC50, (96h), fish, 1.7-2.4 mg/l (OECD 203)
EC50, (48h), Daphnia magna, 2.91 mg/l (OECD 202)
EC50, (48h), Daphnia magna, 0.11 mg/l (OECD 202)
EC50, (72h), Pseudokirchneriella subcapitata, 0.0711 mg/l (OECD 201)
NOEC, (48h), Daphnia magna, 1.99 mg/l

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

The product is mobile in an aqueous environment.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
For recycling, consult manufacturer.

Waste no. (recommended) 160903*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	3108
Inland navigation (ADN)	3108
Marine transport in accordance with IMDG	3108
Air transport in accordance with IATA	3108

14.2 UN proper shipping name

Transport by land according to ADR/RID	Organic Peroxide type E, solid, Dibenzoyl peroxide
- Classification Code	P1
- Label	
- ADR LQ	0,5 kg
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D)
Inland navigation (ADN)	Organic Peroxide type E, solid, Dibenzoyl peroxide
- Classification Code	P1
- Label	
Marine transport in accordance with IMDG	Organic peroxide Type E, solid, Dibenzoyl peroxide
- EMS	F-J, S-R
- Label	
- IMDG LQ	0,5 kg
Air transport in accordance with IATA	Organic Peroxide Type E, solid, Dibenzoyl peroxide
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	5.2 (N)
Inland navigation (ADN)	5.2 (N)
Marine transport in accordance with IMDG	5.2
Air transport in accordance with IATA	5.2

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

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

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Org. Perox. E: H242 Heating may cause a fire. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Aquatic Acute 1: H400 Very toxic to aquatic life. (Calculation method)
Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects. (Calculation method)

Modified position

none