



Safety Data Sheet Temp Bond Modifier

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : Temp Bond Modifier

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

Relevant identified uses

Main use category : Professional use

Function or use category : Dental materials.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311
[E-mail: safety@kerrhawe.com](mailto:safety@kerrhawe.com)

Manufacturer

Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311
[E-mail: safety@kerrhawe.com](mailto:safety@kerrhawe.com)

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Chronic 2 H411

Full text of classification categories and H statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS09

Signal word (CLP) : -

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/container to ...

Extra phrases : The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1907/2006, article 2, paragraph 6c).

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substance**

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
zinc oxide	(CAS No) 1314-13-2 (EC no) 215-222-5 (EC index no) 030-013-00-7 (REACH-no) 01-2119463881-32	=>5-<15	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

First-aid measures general : No particular/specific measures required.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No specific measures identified.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO2) and powder.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Avoid contact with skin and eyes.

For non-emergency personnel

Protective equipment : See Heading 8.

For emergency responders

No additional information available

6.2. Environmental precautions

Discharging into rivers and drains is forbidden.

6.3. Methods and material for containment and cleaning up

For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Precautions for safe handling : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container. Store in original container.
 Incompatible products : Oxidizing agent. Strong acids.
 Incompatible materials : Acids.
 Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

Consult the supplier for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
 Personal protective equipment : Gloves. Safety glasses.
 Hand protection : Wear suitable gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). Layer thickness : 0,09mm. Breakthrough time : >480 min
 Eye protection : Safety glasses. STANDARD EN 166.
 Skin and body protection : Wear suitable protective clothing
 Respiratory protection : Respiratory protection not applicable



Other information : Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state : Liquid
 Appearance : Paste.
 Colour : white.
 Odour : none to slight.
 Odour threshold : No data available
 pH : No data available
 Relative evaporation rate (butylacetate=1) : No data available
 Melting point : No data available
 Freezing point : No data available
 Boiling point : No data available
 Flash point : No data available
 Auto-ignition temperature : No data available
 Decomposition temperature : No data available
 Flammability (solid, gas) : No data available
 Vapour pressure : >
 Relative vapour density at 20 °C : No data available
 Relative density : > 1
 Solubility : Material insoluble in water.
 Log Pow : No data available
 Viscosity, kinematic : No data available
 Viscosity, dynamic : No data available
 Explosive properties : Product is not explosive.

Oxidising properties : No data available
 Explosive limits : No data available

9.2. Other information

Additional information : None to our knowledge

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No polymerization.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : May cause irritation to the digestive tract

zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	> 7950 mg/kg Oral, mouse
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	0.57 mg/l/4h

Skin corrosion/irritation : Slight skin irritant.
 Serious eye damage/irritation : Eye irritation is also possible
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified
 Specific target organ toxicity (repeated exposure) : Not classified
 Aspiration hazard : Not classified
 Potential adverse human health effects and symptoms : Under normal conditions of use, no adverse effects to health have been observed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

zinc oxide (1314-13-2)	
LC50 fish 1	1.1 mg/l 96 h (Onchorhynchus mykiss)
EC50 Daphnia 1	24.6 48 h (Daphnia magna)

12.2. Persistence and degradability

Temp Bond Modifier	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Temp Bond Modifier	
Bioaccumulative potential	No data.
zinc oxide (1314-13-2)	
Bioconcentration factor (BCF REACH)	92

12.4. Mobility in soil**Temp Bond Modifier**

Ecology - soil

Slightly soluble.

12.5. Results of PBT and vPvB assessment**Temp Bond Modifier**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : No other effects known

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Regional legislation (waste) : Dispose as hazardous waste.

Waste treatment methods : Recover the product with absorbent material. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3077

UN-No. (IMDG) : 3077

UN-No. (IATA) : 3077

UN-No. (RID) : 3077

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s.

Proper Shipping Name (RID) : Not applicable

Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide(1314-13-2)), 9, III, (E)

Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)**ADR**

Transport hazard class(es) (ADR) : 9

Danger labels (ADR) : 9

**IMDG**

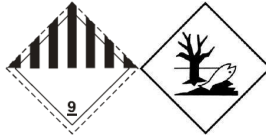
Transport hazard class(es) (IMDG) : 9

Danger labels (IMDG) : 9

**IATA**

Transport hazard class(es) (IATA) : 9

Hazard labels (IATA) : 9

**RID**

Transport hazard class(es) (RID)

: Not applicable

**14.4. Packing group**

Packing group (ADR)

: III

Packing group (IMDG)

: III

Packing group (IATA)

: III

Packing group (RID)

: Not applicable

14.5. Environmental hazards

Dangerous for the environment

: Yes

Marine pollutant

: Yes

Other information

: No supplementary information available

14.6. Special precautions for user**- Overland transport**

Classification code (ADR)

: M7

Special provisions (ADR)

: 274, 335, 601, 375

Limited quantities (ADR)

: 5kg

Excepted quantities (ADR)

: E1

Packing instructions (ADR)

: P002, IBC08, LP02, R001

Special packing provisions (ADR)

: PP12, B3

Mixed packing provisions (ADR)

: MP10

Portable tank and bulk container instructions (ADR)

: T1, BK1, BK2

Portable tank and bulk container special provisions (ADR)

: TP33

Tank code (ADR)

: SGAV, LGBV

Vehicle for tank carriage

: AT

Transport category (ADR)

: 3

Special provisions for carriage - Packages (ADR)

: V13

Special provisions for carriage - Bulk (ADR)

: VC1, VC2

Special provisions for carriage - Loading, unloading and handling (ADR)

: CV13

Hazard identification number (Kemler No.)

: 90

Orange plates



Tunnel restriction code (ADR)

: E

EAC code

: 2Z

- Transport by sea

Special provisions (IMDG)

: 274, 335, 966, 967

Limited quantities (IMDG)

: 5 kg

Excepted quantities (IMDG)

: E1

Packing instructions (IMDG)

: P002, LP02

Special packing provisions (IMDG)

: PP12

IBC packing instructions (IMDG)

: IBC08

IBC special provisions (IMDG)

: B3

Tank instructions (IMDG)	: T1, BK1, BK2, BK3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and segregation (IMDG)	: When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: OTHER INFORMATION

Indication of changes:

Regulatory information.

2.1	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	
3.2	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	

Date of issue	: 05/12/2008
Revision date	: 28/08/2015
Supersedes	: 30/09/2014
Signature	: A. Åsebø Murel

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.