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

- **1.1 Product identifier**

- **Trade name:** **TB 1281B**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category** PC1 Adhesives, sealants
- **Application of the substance / the mixture** SILICONE SEALING GASKET

- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** THREE BOND EUROPE S.A.S TEL : 33 (0)1 34 32 39 60
B.P 9105
95073 CERGY PONTOISE FAX : 33 (0)1 34 32 39 61
FRANCE

- **Information department:** Three Bond Europe H&S department : msds@threebond.fr
Site : http://quickfds.com

- **1.4 Emergency telephone number:** ORFILA (France) - Tel : +33 (0)1 45 42 59 59 (24h)
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**


GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.


GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.


GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.

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- **Hazard pictograms**

GHS05 GHS07 GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:** 2-Butanone, O,O',O''-(ethenylsilylidyne)trioxime
2-butanone oxime
3-aminopropyltriethoxysilane
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**

P261	Avoid breathing vapours.
P280	Wear protective gloves / eye protection.
P273	Avoid release to the environment.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1314-13-2 EINECS: 215-222-5	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	25-50%
CAS: 2224-33-1 EINECS: 218-747-8	2-Butanone, O,O',O''-(ethenylsilylidyne)trioxime Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
CAS: 108-88-3 EINECS: 203-625-9	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	1-2.5%
CAS: 96-29-7 EINECS: 202-496-6	2-butanone oxime Carc. 2, H351; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317	≤1%
CAS: 919-30-2 EINECS: 213-048-4 Reg.nr.: 01-2119480479-24-XXXX	3-aminopropyltriethoxysilane Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317	0.1-0.5%

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- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Do not induce vomiting; call for medical help immediately.
A person vomiting while lying on their back should be turned onto their side.
Induce vomiting, only if affected person is fully conscious.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
CO_2, extinguishing powder or water spray. Fight larger fires with water spray.
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide (CO)
Nitrogen oxides (NOx)
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.
Wear fully protective suit.
- **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation
Wear protective clothing.

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- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections** See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
Use only receptacles specifically permitted for this substance/ product.
- **Information about storage in one common storage facility:** Store away from water.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures should be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

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- **Protection of hands:** Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Nitrile rubber, NBR
- **Penetration time of glove material** The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  Form: Pasty
  Colour: Red
- **Odour:** Characteristic

- **pH-value:** Not applicable.

- **Change in condition**
  Melting point/freezing point: undetermined
  Initial boiling point and boiling range: undetermined

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not determined.

- **Self igniting:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Vapour pressure:** Not applicable.

- **Density at 25 °C:** 1.4 g/cm³
- **Vapour density** Not applicable.
- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**
  Water: Insoluble

- **Viscosity:**
  dynamic: Not determined
  kinematic: Not determined
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

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- **10.6 Hazardous decomposition products:** gases/vapours (MEKO)
Liberates butanone-oxime (MEKO) on exposure to humid air.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

108-88-3 toluene		
Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rab)
Inhalative	LC50/4 h	5320 mg/l (mouse)
96-29-7 2-butanone oxime		
Oral	LD50	3700 mg/kg (rat)
Dermal	LD50	200-2000 mg/kg (rat)
Inhalative	LC50/4 h	20 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Suspected of causing cancer.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralised.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must be specially treated adhering to official regulations.

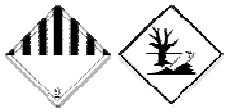
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.
Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**	
- **ADR, IMDG, IATA**	UN3077
- **14.2 UN proper shipping name**	
- **ADR**	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
- **IMDG**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), MARINE POLLUTANT
- **IATA**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
- **14.3 Transport hazard class(es)**	
- **ADR**	

- **Class**	9 (M7) Miscellaneous dangerous substances and articles.
- **Label**	9
- **IMDG, IATA**	



- **Class**	9 Miscellaneous dangerous substances and articles.
- **Label**	9
- **14.4 Packing group**	
- **ADR, IMDG, IATA**	III
- **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: zinc oxide
- **Marine pollutant:**	Symbol (fish and tree)
- **Special marking (ADR):**	Symbol (fish and tree)
- **Special marking (IATA):**	Symbol (fish and tree)
- **14.6 Special precautions for user**	Warning: Miscellaneous dangerous substances and articles.
- **Danger code (Kemler):**	90

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- **EMS Number:**	F-A,S-F
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
- **Transport/Additional information:**	
- **ADR**	
- **Limited quantities (LQ)**	5 kg
- **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
- **Transport category**	3
- **Tunnel restriction code**	E
- **IMDG**	
- **Limited quantities (LQ)**	5 kg
- **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
- **UN "Model Regulation":**	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Directive 2012/18/EU**	
- **Named dangerous substances - ANNEX I**	None of the ingredients is listed.
- **Seveso category**	E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements**	100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements**	200 t
- **National regulations**	
- **Water hazard class:**	Generally not hazardous for water.
- **15.2 Chemical safety assessment:**	A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

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Trade name: TB 1281B

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H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

- **Abbreviations and acronyms:** ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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