



## SAFETY DATA SHEET TUBE HARDENER - FOR USE IN FILLER KITS

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

#### 1.1. Product identifier

Product name TUBE HARDENER - FOR USE IN FILLER KITS  
Product No. CCF010(B), CCB010(B), CCB020(B), CCF020(B), EXH001, CCB035(B), FXH001(B), MAC080(B), MAC555(B), MAC556(B), MAC557(B), MAC558(B), SLF016(B), TTK001(B), TTK002(B), TTK035(B), TTK250(B), TTK600(B), TSF016(B), TSF017(B), TSF105(B), USB025(B), USB600(B), USF025(B), USF600(B), WFN012(B), WFN402(B), WFW012(B), WFW402(B), RFC003(B), TSF015(B)

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

Identified uses Hardener. Catalyst.

#### 1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED  
BEVIS GREEN WORKS  
WALMERSLEY  
BURY  
BL9 6RE  
0161 764 5981  
0161 797 5899  
info@tetrosyl.com  
Manufacturer TETROSYL LIMITED  
BEVIS GREEN WORKS  
WALMERSLEY  
BURY  
BL9 6RE  
0161 764 5981  
0161 797 5899  
info@tetrosyl.com

#### 1.4. Emergency telephone number

0161 764 5981

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Org. Perox. C - H242
Human health	Eye Irrit. 2 - H319; Skin Sens. 1 - H317
Environment	Aquatic Acute 1 - H400

Classification (1999/45/EEC) Xi;R36. R43. O;R7. N;R50.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**TUBE HARDENER - FOR USE IN FILLER KITS****2.2. Label elements**

Contains BENZOYL PEROXIDE

Label In Accordance With (EC) No. 1272/2008



Signal Word

Danger

Hazard Statements

H242 Heating may cause a fire.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H400 Very toxic to aquatic life.

Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P235 Keep cool.  
 P302+352 IF ON SKIN: Wash with plenty of soap and water.  
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333+313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337+313 If eye irritation persists: Get medical advice/attention.  
 P411 Store at temperatures not exceeding 25°C / 77°F.  
 P501 Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P220 Keep away from combustible materials.  
 P234 Keep only in original container.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P261 Avoid breathing vapour/spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P321 Specific treatment (see medical advice on this label).  
 P313 Get medical advice/attention.  
 P337 If eye irritation persists:  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.  
 P410 Protect from sunlight.  
 P420 Store away from other materials.

**2.3. Other hazards**

**TUBE HARDENER - FOR USE IN FILLER KITS****3.2. Mixtures**

BENZOYL PEROXIDE		50.0 - <75.0%
CAS-No.: 94-36-0	EC No.: 202-327-6	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Org. Perox. B - H241	Xi;R36.	
Eye Irrit. 2 - H319	O;R7.	
Skin Sens. 1 - H317	N;R50.	
Aquatic Acute 1 - H400	E;R3.	
	R43.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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

## General information

Move the exposed person to fresh air at once. Get medical attention.

## Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention. Place unconscious person on the side in the recovery position and ensure breathing can take place.

## Ingestion

DO NOT induce vomiting. Get medical attention immediately.

## Skin contact

Wash the skin immediately with soap and water. Contact physician if irritation continues.

## Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Do not rub eye. Get medical attention if any discomfort continues.

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

## General information

NOTE! Effects may be delayed. Keep affected person under observation.

## Inhalation

No specific symptoms noted.

## Ingestion

No specific symptoms noted.

## Skin contact

No specific symptoms noted.

## Eye contact

No specific symptoms noted.

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

No specific first aid measures noted.

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

## Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials. Extinguish with foam, carbon dioxide, dry powder or water fog.

**5.2. Special hazards arising from the substance or mixture**

**TUBE HARDENER - FOR USE IN FILLER KITS**

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

**5.3. Advice for firefighters**

Special Fire Fighting Procedures

Water spray should be used to cool containers. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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

Avoid inhalation of vapours and aerosol spray. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces. Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition.

**6.2. Environmental precautions**

Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

**6.3. Methods and material for containment and cleaning up**

Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Provide ventilation and confine spill. Do not allow runoff to sewer. Collect with absorbent, non-combustible material into suitable containers.

**6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

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

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Avoid forming spray/aerosol mists. Provide good ventilation. Read and follow manufacturer's recommendations. Do not handle broken packages without protective equipment.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep upright. Store away from: Reducing Agents. Acids. Alkalis. Protect from freezing and direct sunlight. Store in tightly closed original container in a dry, cool and well-ventilated place.

**7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

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

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
BENZOYL PEROXIDE	WEL	5 mg/m <sup>3</sup>		

**TUBE HARDENER - FOR USE IN FILLER KITS**

WEL = Workplace Exposure Limit.

**8.2. Exposure controls**

Protective equipment



Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. Must not be handled in confined space without sufficient ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Neoprene, nitrile, polyethylene or PVC.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station.

Hygiene measures

Wash contaminated clothing before reuse. Wash promptly with soap & water if skin becomes contaminated.

Wash hands after contact. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**


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**9.1. Information on basic physical and chemical properties**

Appearance	Paste
Colour	Varying.
Odour	Characteristic.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	Not determined.
Melting point (°C)	Not determined.
Vapour density (air=1)	Not determined.
Vapour pressure	Not determined.
Evaporation rate	Not determined.
pH-Value, Conc. Solution	Not determined.
Decomposition temperature (°C)	Not determined.
Odour Threshold, Lower	Not determined.
Odour Threshold, Upper	Not determined.
Flash point (°C)	Not determined.

**TUBE HARDENER - FOR USE IN FILLER KITS**

Auto Ignition Temperature (°C)

Not determined.

Flammability Limit - Lower(%)

Not determined.

Flammability Limit - Upper(%)

Not determined.

Partition Coefficient

(N-Octanol/Water)

Not determined.

Oxidising properties

Not available.

**9.2. Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

No specific reactivity hazards associated with this product.

**10.2. Chemical stability**

Stable under normal temperature conditions and recommended use.

**10.3. Possibility of hazardous reactions**

Polymerisation Description

Avoid alkalis, strong acids and heat.

**10.4. Conditions to avoid**

Avoid contact with oxidisers or reducing agents. Avoid contact with acids and alkalis. Reacts with alkalis and amines generating excessive heat.

**10.5. Incompatible materials**

Materials To Avoid

Strong oxidising substances. Amines. Acids, oxidising. Alkali metals. Alkali earth metals.

**10.6. Hazardous decomposition products**During fire, toxic gases (CO, CO<sub>2</sub>) are formed. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

Toxicological information

No information available.

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. The product contains volatile, organic compounds which have a photochemical ozone creation potential.

**12.1. Toxicity**

Acute Toxicity - Fish

LC50 96 hours 0.0602 mg/l Onchorhynchus mykiss (Rainbow trout)

**TUBE HARDENER - FOR USE IN FILLER KITS**

Acute Toxicity - Aquatic Invertebrates  
Not available.

**12.2. Persistence and degradability**

Degradability  
There are no data on the degradability of this product.

**12.3. Bioaccumulative potential**

Bioaccumulative potential  
No data available on bioaccumulation.  
Partition coefficient  
Not determined.

**12.4. Mobility in soil**

Adsorption/Desorption Coefficient  
Not available.

**12.5. Results of PBT and vPvB assessment**

Not Classified as PBT/vPvB by current EU criteria.

**12.6. Other adverse effects**

Not available.

**SECTION 13: DISPOSAL CONSIDERATIONS**

General information  
Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

**13.1. Waste treatment methods**

Confirm disposal procedures with environmental engineer and local regulations.

**SECTION 14: TRANSPORT INFORMATION****14.1. UN number**

UN No. (ADR/RID/ADN)	3108
UN No. (IMDG)	3108
UN No. (ICAO)	3108

**14.2. UN proper shipping name**

Proper Shipping Name      ORGANIC PEROXIDE TYPE E, SOLID (BENZOYL PEROXIDE)

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

ADR/RID/ADN Class	5.2
ADR/RID/ADN Class	Class 5.2: Organic peroxides.
ADR Label No.	5.2
IMDG Class	5.2
ICAO Class/Division	5.2
Transport Labels	

**TUBE HARDENER - FOR USE IN FILLER KITS****14.4. Packing group**

Not applicable.

**14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant

**14.6. Special precautions for user**

EMS	F-J, S-R
Emergency Action Code	1W
Tunnel Restriction Code	(D)

**14.7. Transport in bulk according to Annex II of MARPOL73/78 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 Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	16/02/2015
Revision	12
Supersedes date	28/04/2014 v11
Safety Data Sheet Status	Approved.



## TUBE HARDENER - FOR USE IN FILLER KITS

### Risk Phrases In Full

R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36	Irritating to eyes.
R7	May cause fire.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.

### Hazard Statements In Full

H319	Causes serious eye irritation.
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.