



Revision Date 11/02/14

**SAFETY DATA SHEET
DETECTASIL**

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

1.1. Product identifier

Product name DETECTASIL

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

Identified uses Metal detectable sealant. X-ray detectable sealant.

1.3. Details of the supplier of the safety data sheet

Supplier Detectamet
Unit 55, Halifax Way
Pocklington Industrial Estate
York
YO42 1NR
0044 (0) 1759 304200
0044 (0) 1759 305236
sales@detectamet.com

1.4. Emergency telephone number

0044 (0) 1759 304200 (office hours only)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Skin Sens. 1 - H317
Environment	Not classified.

Classification (1999/45/EEC)

R43.

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

Human health

The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals in contact with skin.

Environment

The product is not expected to be hazardous to the environment.

2.2. Label elements

Contains METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE

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



Signal Word Warning

Hazard Statements

H317 May cause an allergic skin reaction.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P501 Dispose of contents/container to ...

Supplementary Precautionary Statements

P272 Contaminated work clothing should not be allowed out of the workplace.
P261 Avoid breathing vapour/spray.
P321 Specific treatment (see medical advice on this label).
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

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2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE		1 - 5%
CAS-No.: 22984-54-9	EC No.: 245-366-4	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.	
3-(2-AMINOETHYLAMINO)-PROPYLTRIMETHOXYSILANE		< 1%
CAS-No.: 1760-24-3	EC No.: 217-164-6	
Classification (EC 1272/2008) Acute Tox. 4 - H332 Eye Dam. 1 - H318 Skin Sens. 1 - H317	Classification (67/548/EEC) Xn;R20. Xi;R41. N;R51/53.	

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

In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation

Remove victim immediately from source of exposure. Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water (200-300 ml). Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Wipe off excess material with cloth or paper. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation

No specific symptoms noted.

Ingestion

May cause discomfort if swallowed.

Skin contact

Allergic rash.

Eye contact

May cause temporary eye irritation.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Water spray, fog or mist. Foam, carbon dioxide or dry powder.
Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

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
In case of fire, toxic gases may be formed (COx, NOx).

5.3. Advice for firefighters

Special Fire Fighting Procedures
No specific fire fighting procedure given.
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

Wear appropriate protective clothing. Avoid contact with eyes and skin.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Collect in containers and seal securely. Clean any slippery coating that remains using a detergent / soap solution or other biodegradable cleaner.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Persons susceptible to allergic reactions should not handle this product. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.
Storage Class
Miscellaneous hazardous material storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.
Usage Description
Gunnable sealant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments
No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use of ABEK mask filter during prolonged exposure advised.

Hand protection

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Thixotropic paste.
Colour	White. Blue
Odour	Noticeable.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	Not applicable.
Melting point (°C)	Not applicable.
Relative density	1.10 @ 20°C
Vapour density (air=1)	Not applicable.
Vapour pressure	Not applicable.
Evaporation rate	Not applicable.
Evaporation Factor	Not applicable.
pH-Value, Conc. Solution	Not applicable.
pH-Value, Diluted Solution	Not applicable.
Viscosity	8000 - 10000 Ps @ 20°C
Solubility Value (G/100G H2O@20°C)	Not applicable.
Decomposition temperature (°C)	Not determined.
Odour Threshold, Lower	Not determined.
Odour Threshold, Upper	Not determined.
Flash point (°C)	Not applicable.
Auto Ignition Temperature (°C)	430
Flammability Limit - Lower(%)	Not applicable.
Flammability Limit - Upper(%)	Not applicable.
Partition Coefficient (N-Octanol/Water)	Not applicable.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

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

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Stable under normal temperature conditions and recommended use. Moisture curing process releases: a small amount of butanone-2-oxime (MEKO)

10.3. Possibility of hazardous reactions

Not known.
Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with: Moisture

10.5. Incompatible materials

Materials To Avoid
Strong oxidising substances.

10.6. Hazardous decomposition products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed. Temperatures of ~ 150 C may generate: A small amount of formaldehyde, through oxidation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50
Methyl-0-0'-0"-butan-2-one-trioximosilane >1000 mg/kg (oral rat)
Toxic Conc. - LC 50
Methyl-0-0'-0"-butan-2-one-trioximosilane >50 mg/l/4h (inh-rat)

Toxicological information

Butanone-2-oxime (MEKO) is damaging to nasal membranes in rats and mice at a concentration in excess of 10ppm over a prolonged period of time.

Acute toxicity:

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

The product contains a small amount of a sensitising substance which may cause an allergic reaction in sensitive individuals.

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.

Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Not relevant, due to the form of the product.

Inhalation

No specific health warnings noted.

Ingestion

May cause discomfort if swallowed.

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Skin contact

May cause sensitisation by skin contact.

Eye contact

May cause irritation to eyes.

Health Warnings

Moisture curing process releases a small amount of butanone-2-oxime (MEKO) which can irritate skin and mucous membranes. Prolonged exposure to large quantities of MEKO may cause irreversible damage to health

Route of entry

Skin and/or eye contact.

Medical Symptoms

Allergic rash.

Medical Considerations

Skin disorders and allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

In cross-linked state not soluble in water. Easily separable from water by filtration.

12.1. Toxicity

There are no data for the product.

Acute Toxicity - Fish

LC50 96 hours MEKO 48 mg/l *Lepomis macrochirus* (Bluegill)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours MEKO 750 mg/l *Daphnia magna*

12.2. Persistence and degradability

Degradability

The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Partition coefficient

Not applicable.

12.4. Mobility in soil

Mobility:

The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

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.

Waste Class

Recommended EWC Code 08 04 09*

H13 - Sensitising

SECTION 14: TRANSPORT INFORMATION

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General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

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

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) 1907/2006 REACH. Regulation (EC) 1272/2008 CLP.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

First issue.

Revision Date 11/02/14

SDS No. 10418

Risk Phrases In Full

R20 Harmful by inhalation.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R41 Risk of serious damage to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

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Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his