

# MATERIAL SAFETY DATA SHEET

871 22 + col. ref.

## Polydex High Build



### SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY

Product Name: **POLYDEX HIGH BUILD**  
 Company Name: Polycote UK  
 Centre Point • Wolseley Road  
 Woburn Road Industrial Estate  
 Kempston • Beds MK42 7EF  
 Telephone Number: 01234 846400

### SECTION 2: HAZARDS IDENTIFICATION

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**  
 Skin Sens. 1B, H317  
 Aquatic Chronic 2, H411

Human health hazards: May cause sensitisation by skin contact.  
 Environmental hazards: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard pictograms:

Signal word: Warning  
 Hazard statements: May cause an allergic skin reaction.  
 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**  
 Prevention: P261 - Avoid breathing vapour or spray.  
 P280 - Wear protective gloves:  
 - nitrile rubber gloves  
 P273 - Avoid release to the environment.  
 Response: P302 - IF ON SKIN:  
 P352 - Wash with plenty of soap and water.  
 P333 - If skin irritation or rash occurs:  
 P313 - Get medical attention.  
 Storage: Not applicable.  
 Disposal: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements:  
 Contains: Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1).

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Classification			Type	
	EC No.	CAS No.	%		
zinc bis (orthophosphate)	231-944-3	7779-90-0	>5 - <10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
polypropyleneglycol-alkylphenylether	-	9064-13-5	>1 - <3	Skin Sens. 1B, H317	[1]
zinc oxide	215-222-5	1314-13-2	0.25 - <2.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
diphenyl tolyl phosphate	247-693-8	26444-49-5	<0.1 - <0.3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]

See section 16 for the full text of the R Phrases and H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard.

### SECTION 4: FIRST AID MEASURES

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye Contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if irregular breathing or respiratory arrest occurs provide artificial respiration or oxygen by trained personnel.

Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleaner. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### Most important symptoms and effects, both acute and delayed:

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains polypropyleneglycol-alkylphenylether, Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

### SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media:  
 Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray.  
 Not to be used: water jet.

Hazards from the substance or mixture:  
 Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products:  
 Decomposition products may include the following materials:  
 carbon dioxide, carbon monoxide, smoke, oxides of nitrogen.

Special protective actions for fire-fighters:  
 Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.  
 Appropriate breathing apparatus may be required.

Additional information:  
 No unusual hazard if involved in a fire.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES****Environmental precautions:**

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**Spillage and cleaning up:**

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean, preferably with a detergent, avoid use of solvents.

**SECTION 7: HANDLING AND STORAGE****Handling:** Keep away from heat, sparks and flame.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

**Information on fire and explosion protection**

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

**Storage:** Keep away from: oxidising agents, strong alkalis, strong acids. Observe label precautions. Do not store below the following temperature: 0°C (32°F).

Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

**SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION****Occupational exposure limits:**

No exposure limit value known.

**Recommended monitoring procedures:**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

**DNELs/DMELs:**

Product/ingredient name	Type	Exposure	Value	Population	Effects
trizinc bis(orthophosphate)	DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	0.83 mg/kg bw/day	Consumers	Systemic

**zinc oxide**

DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	Consumers	Systemic
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DNEL	Long term Oral	0.83 mg/kg bw/day	Consumers	Systemic

**PNECs:**

Product/ingredient name	Compartment Detail	Value	Method Detail
trizinc bis(orthophosphate)	Fresh water	48,1 µg/l	-
	Marine	14,2 µg/l	-
	Fresh water sediment	550,2 mg/kg	-
	Marine water sediment	263,9 mg/kg	-
	Soil	249,4 mg/kg	-
	Sewage Treatment Plant	121,4 µg/l	-

**zinc oxide**

Fresh water	25,6 µg/l	-
Marine	7,6 µg/l	-
Sewage Treatment Plant	64,7 µg/l	-
Fresh water sediment	146 mg/kg dwt	-
Marine water sediment	70,3 mg/kg dwt	-
Soil	44,3 mg/kg dwt	-

**Appropriate engineering controls:**

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

**Hygiene measures:**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection:**

Safety glasses with side shields. (EN166)

**Skin/hand protection:**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves:** For prolonged or repeated handling, use the following type of gloves: > 8 hours (breakthrough time): nitrile rubber (0.5mm) (EN 374). The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection:**

Wear overalls or long sleeved shirt. (EN 467).

**Other skin protection:**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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**SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION – Cont.****Respiratory protection:**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour (Type A) and particulate filter (EN 141).

**Environmental exposure controls:**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

Physical state:	Liquid
Colour:	Various
Odour:	Faint odour
pH:	8 to 9 (Basic)
Melting/freezing point:	0°C
Boiling point:	>100°C (>212°F)
Evaporation rate:	<1 (butyl acetate = 1)
Flammability (solid, gas):	Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. Non-flammable but will burn on prolonged exposure to flame or high temperature.
Vapour density:	>1 (Air = 1)
Viscosity:	Dynamic 6500 to 9000 mPa-s
Relative density (kg/L):	1,2 to 1,3
Solubility(ies):	Soluble in the following materials: cold water and hot water. Very slightly soluble in the following materials: methanol and acetone.

**SECTION 10: STABILITY AND REACTIVITY**

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	Stable under recommended storage and handling conditions (see section 7).
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials:	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated.

**SECTION 11: TOXICOLOGICAL INFORMATION**

There are no data available on the mixture itself. See sections 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains polypropyleneglycol-alkylphenylether. May produce an allergic reaction.

**Acute Toxicity**

Ingredient name	Result	Species	Dose	Exposure
trizinc bis(orthophosphate)				
	LC50 Inhalation Dusts & mists	Rat	>5.7 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
polypropyleneglycol-alkylphenylether				
	LD50 Oral	Rat	6000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
zinc oxide				
	LC50 Inhalation Dusts & mists	Mouse	2500 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Dusts & mists	Rat	>5700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	>15 g/kg	-
diphenyl tolyl phosphate				
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1420 mg/kg	-

**Irritation/Corrosion**

Ingredient name	Result	Species	Score	Exposure
zinc oxide	Eyes – Mild irritant	Rabbit	-	24 hrs 500 mgms
	Skin – Mild irritant	Rabbit	-	24 hrs 500 mgms

**Sensitisation**

Ingredient name	Route of exposure	Species	Result
polypropyleneglycol-alkylphenylether	Skin	Mouse	Sensitising

**Conclusion/Summary:**

Skin: May cause an allergic skin reaction.

**SECTION 12: ECOLOGICAL INFORMATION**

There is no data available on the preparation itself. Do not allow to enter drains or watercourses.

**Toxicity**

Ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute EC50, 5.7 mg/l	Daphnia – spec. - ceriodaphnia dubia	48 hours
	Acute IC50, 1.87 mg/l	Algae – selenastrum capricornutum	72hours
diphenyl tolyl phosphate	Acute LC50 10 mg/l	Fish	96 hours

Conclusion/Summary: Toxic to aquatic life with long lasting effects.

**Persistence and degradability**

Ingredient name	Test	Result	Dose	Inoculum
polypropyleneglycol-alkylphenylether	OECD 301F	80% to 90% – Readily – 28 days	-	Activated sludge

**Biodegradability**

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
polypropyleneglycol-alkylphenylether	-	-	Readily
hydrocarbons, C10C13, n-/ iso-/ cyclo-alkanes, <2% aromatics	Fresh water < 28 days	80%; <28 day(s)	Readily
2-butanone oxime	-	-	Readily

**Bioaccumulative potential**

Ingredient name	LogP <sub>ow</sub>	BCF	Potential
polypropyleneglycol-alkylphenylether	2.78	-	Low
diphenyl tolyl phosphate	4.51	323,593656929	Low

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**SECTION 13: DISPOSAL CONSIDERATIONS**

## Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste: Yes.

## Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

## European waste catalogue (EWC):

The European Waste Catalogue classification of this product, when disposed of as waste, is 08 01 15\* aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances.

## Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

## Disposal considerations:

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste.

## Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: TRANSPORT INFORMATION**

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the produce know what to do in the event of an accident or spillage.

**International transport regulations**

Regulatory information	UN number	Proper shipping name	Class	PG*	Additional information
ADR/RID Class	3082	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis(orthophosphate)]	9	III	Limited quantity: LQ7 Remarks: (< 5L:) Limited Quantity – ADR/IMDG 3.4 ADR Tunnel Code: (E)
IMDG Class	3082	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis(orthophosphate)] Marine pollutant [trizinc bis(orthophosphate)]	9	III	Emergency schedules (EmS) F-A + S-F Marine pollutant: (P) Remarks: (< 5L:) Limited Quantity ADR/IMDG 3.4.6
IATA Class	3082	Environmentally hazardous substance, liquid, n.o.s. [trizinc bis(orthophosphate)]	9	III	Passenger and Cargo Aircraft. Quantity limitation: 450 L. Packaging instructions: 964 Cargo Aircraft Only. Quantity limitation: 450L Packaging instructions: 964 Limited Quantities – Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y 964

PG\* – Packing group

**SECTION 15: REGULATORY INFORMATION****Other EU Regulations**

VOC The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-to-Use Mixture:

2004/42/EC – IIA/i: 140g/l (2007) 140g/l (2010). <= 15g/l VOC.

Europe inventory:

All components are listed or exempted.

CN Code: 3209 10 00

**SECTION 16: OTHER INFORMATION**

## Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

## Full text of abbreviated H statements:

H317 May cause an allergic skin reaction.

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.

## Full text of classifications (CLP/GHS)

Aquatic Acute 1, H400

AQUATIC TOXICITY (ACUTE) – Category 1

Aquatic Chronic 1, H410

AQUATIC TOXICITY (CHRONIC) – Category 1

Aquatic Chronic 2, H411

AQUATIC TOXICITY (CHRONIC) – Category 2

Skin Sens. 1, H317

SKIN SENSITIZATION - Category 1

Skin Sens. 1B, H317

SKIN SENSITIZATION – Category 1B

The Safety Data above is applicable to the product only as used according to the purposes and methods described on the relevant Technical Data Sheet, available from Polycote UK on request.

The information above is based on our present knowledge and is believed to be correct but does not purport to be all inclusive and should only be used as a guide. No warranty is implied with respect to the specification of the product. It is intended to describe the product solely in terms of its safety requirements and relates only to the specific material designed and may not be valid for such material used in combination with any other materials or in any process. This data does not constitute the users own assessment of workplace risk as required by other Health and Safety legislation, nor is it a sales specification or indication of suitability for any particular use. The user must satisfy himself as to the suitability of the product for his purpose. No legally valid contractual relationship is established by the above data, and Polycote UK shall not be held liable for any damage resulting from handling or from contact with the above product.

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