

MATERIAL SAFETY DATA SHEET According to EC Directive 91/155 EC Date: 01/08/10

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Details:

Trade Names: AppTaq Polymerase

Catalogue Numbers: ARP001
ARP003

Kit Components: AppTaq Polymerase 5U/ μ l
5x Appleton reaction buffer





For the Life Scientist

New Lindon House
Catesby Park
Kings Norton
Birmingham
B38 8SE
Tel: 0121 458 7740
Fax: 0121 458 5510
Email: sales@appletonwoods.co.uk

1.2 Company Details

Manufacturer/ Supplier:

Appleton Woods Ltd

Catesby Park

Kings Norton

Birmingham

B38 8SE

United Kingdom

Telephone +44 (0) 121 458 7740

Email info@appletonwoods.co.uk

Further Information Obtainable from: Technical Services

Details as above

1.3 Emergency Details

In case of emergency:

Appleton Woods Ltd

Catesby Park

Kings Norton

Birmingham

B38 8SE

United Kingdom

Telephone +44 (0) 121 458 7740

2 Hazards identification

- **Trade name** AppTaq Polymerase 5U/ μ l
- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **Information concerning particular hazards for human and environment:** The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:** The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- **Label elements · Labelling according to EU guidelines:** Observe the general safety regulations when handling chemicals The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).
- **Safety phrases:** 35 This material and its container must be disposed of in a safe way.
- **Other hazards · Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures · Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Glycerol CAS: 56-81-5 EINECS: 200-289-5
- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting and call for medical help.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- **Reference to other sections** No dangerous substances are released. See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- **Handling · Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification

- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** **56-81-5 glycerol WEL ()** Long-term value: 10 mg/m³
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**

- **Appearance: Form:** Fluid **Colour:** Colourless
- **Odour:** Odourless
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition Melting point/Melting range:** undetermined
Boiling point/Boiling range: 100°C
- **Flash point:** > 55°C
- **Flammability (solid, gaseous)** Not applicable.
- **Ignition temperature:** 270°C
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits: Lower:** 1.8 Vol %
Upper: 63.0 Vol % · **Vapour pressure at 20°C:** 23 hPa
- **Density:** Not determined
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity: dynamic:** Not determined.
kinematic: Not determined.
- **Solvent content: Organic solvents:** 12.0 % **Water:** 71.3 % **Solids content:** 16.7 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification: 67-68-5 dimethyl sulfoxide** Oral LD50 14500 mg/kg (rat)
- **Primary irritant effect: · on the skin:** No irritant effect.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

Maritime transport IMDG:

- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Technical instructions (air): Class** Share in % NK 10-20
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

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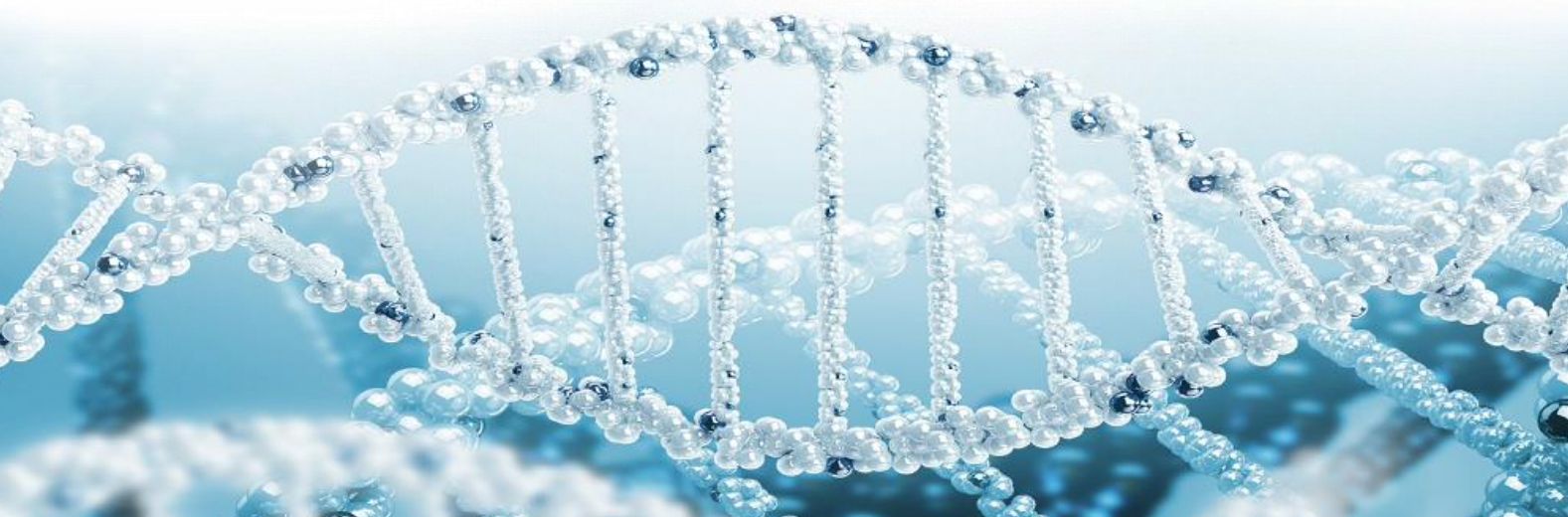
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- **Labelling according to EU guidelines:**
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- **Safety phrases:** 35 This material and its container must be disposed of in a safe way.
- **Other hazards**
- **Results of PBT and vPvB assessment**
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- **Results of PBT and vPvB assessment**
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- **Other adverse effects** No further relevant information available.



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16 Other information

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- **Department issuing MSDS:** Environmental Health and Safety.