 <b>Atlas Medical</b>	<b>File Title:</b> Product File.	<b>Document Title:</b> Material Safety Data Sheet.	<b>Date Issued</b> 02.04.2017
	<b>Item Title:</b> Free T4 Elisa kit, 96T/Kit	<b>Item Code:</b> 8.12.03.0.0096	<b>Issue Level:</b> 1.1


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**1. Amendment Record**

Issue Level	Date Issued	Summary of Amendment	Reviewed by
1.1	02.04.2017	General Review	Amani

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## 2. General Information.

Trade Names & Synonyms:	Free T4 Elisa kit, 96T/Kit
Chemical Family:	In Vitro Diagnostic Test kit (ELISA KITS).
Formula:	Not Applicable.
Manufacturer:	Atlas Medical.
Manufacturer's address:	William James House Cowley Road Cambridge, CB4 0WX, UK.
Manufacturer's phone:	+44 (0) 1223 858 910
Manufacturer's Fax:	+44 (0) 1223 858 524
Email:	<a href="mailto:info@atlas-site.co.uk">info@atlas-site.co.uk</a>

## 3. Composition, Information on Active Ingredients.

REAGENTS	INITIAL CONCENTRATION	CLASSIFICATION
<b>STD 1 FT4 1.0 mL</b>		NOT DANGEROUS
FT4	0 pmol/L	
Proclin300	0.20%	
Plasma free of hormones	N/A	
Sodium azide	0.2%	
<b>STD 2 FT4 1.0 mL</b>		NOT DANGEROUS
FT4	5.0 pmol/L	
Proclin300	0.20%	
Plasma free of hormones	N/A	
Sodium azide	0.2%	
<b>STD 3 FT4 1.0 mL</b>		NOT DANGEROUS

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FT4 10 pmol/L  
 Proclin300 0.20%  
 Plasma free of hormones N/A  
 Sodium azide 0.2%

**STD 4 FT4 1.0 mL** NOT DANGEROUS

FT4 20 pmol/L  
 Proclin300 0.20%  
 Plasma free of hormones N/A  
 Sodium azide 0.2%

**STD 5 FT4 1.0 mL** NOT DANGEROUS

FT4 50 pmol/L  
 Proclin300 0.20%  
 Plasma free of hormones N/A  
 Sodium azide 0.2%

**STD 6 FT4 1.0 mL** NOT DANGEROUS

FT4 100 pmol/L  
 Proclin300 0.20%  
 Plasma free of hormones N/A  
 Sodium azide 0.2%

**ENZYME CONJUGATE** NOT DANGEROUS

Tris 0.05mol/L  
 BSA 2%  
 Proclin 300 0.2%  
 Anti-T4 1:3500


**COATED MICROPLATE** NOT DANGEROUS

Coated with T4 structural analog 1:10000  
 Other ingredients

**TMB SUBSTRATE** NOT DANGEROUS

3,3',5,5'- tetramethylbenzidine 0.03%

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Hydrogen peroxide 0.015%  
 Other ingredients

**WASH SOLUTION** NOT DANGEROUS

PBS 0.01M  
 TWEEN 20 0.05%

**STOP SOLUTION** NOT DANGEROUS

Sulphuric Acid 1M

#### 4. Hazard Information.

##### Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3.

##### Label elements

Not a hazardous substance or mixture.

#### 5. Health Hazard Data.

Sodium Azide:

Spill: Not applicable.

Exposure Controls: Not applicable.

Personal Protection: Not applicable.

Physical Properties: Not applicable.

Stability/Reactivity: Stable. Non-reactive in this test.

Toxicological Information: Exposure above acceptable limits may be harmful

#### 6. Fire & Explosion Hazard Data.

Non-flammable

Using the reagents according to protocol should not incur a fire or explosion hazard.


In case of fire, use water, foam, carbon dioxide, or dry chemical, as suitable for the surrounding fire and materials.

#### 7. Accidental release measures.

##### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

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### **Environmental precautions**

Environmental precautions: Local authorities should be advised if significant spillages cannot be contained.

### **Methods and material for containment and cleaning up**

Methods for cleaning up: Wipe up with absorbent material (e.g. cloth, fleece).

Keep in suitable, closed containers for disposal

## **8. Handling and Storage.**

### **Handling**

Handling No special requirements.

### **Conditions for safe storage**

Storage Store in tightly closed containers under cool conditions.

## **9. Exposure control and personal gear.**

### **Exposure controls**

Eye protection: Safety glasses.

Hand protection: Protective gloves.

Wash hands before breaks and at the end of work. Skin and body protection

Protective Sui


Respiratory protection: No personal respiratory protective equipment normally required.

## **10. Physical and chemical properties.**

### **General Information**

The thyroid hormone thyroxine (T4) is physiologically part of the regulating circuit of the thyroid gland and has an effect on general metabolism. The major fraction of the total thyroxine is bound to transport proteins (TBG, prealbumin, and albumin). The free thyroxine (fT4) is the physiologically active thyroxine component. The determination of free thyroxine is an important element in clinical routine diagnostics. Free T4 is measured together with TSH when thyroid function disorders are suspected. The determination of FT4 is also suitable for monitoring thyrosuppressive therapy. The determination of free T4 has the advantage of being independent of changes in the concentrations and binding

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properties of the binding proteins; additional determination of a binding parameter (T-uptake, TBG) is therefore unnecessary.

**Odor:** Odorless.

**Flash point:** Not applicable.

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

**Danger of explosion:** Product does not present an explosion hazard.

### 11. Stability and Reactivity Data.

**Stability:** The product is stable in accordance with the recommended storage conditions.

**Materials to be avoided:** None.

**Hazardous reactions:** No dangerous reactions known.

**Hazardous decomposition products:** No dangerous decomposition products known.

These products should not be used if turbid, and should **not** be diluted. Stable until expiry date stated on the vial if stored according to manufacturers recommendation

### 12. Toxicological information.

**Acute toxicity:** Quantitative data on the toxic effects of this product is not available.

**Primary effects:**

**After skin contact:** No irritating effects known.

**After eye contact:** No irritating effects known.

**Sensitization:** No sensitizing effects known.

### 13. Ecological information.

**Environmental Toxicity:**

Quantitative data on the toxic effects of this product is not available.

**Incorrect sample and used kit disposable:**

Bio-hazards may exert cumulative environmental effects due to chemicals and biological materials present in the test kit.

### 14. Waste disposal information.

**Product:**


When disposing of reagents that contain Sodium azide, flush down the drain with copious amounts of tap water to prevent the build-up of explosive residues in the plumbing. As this reagent is of animal origin care must be taken during disposal, as there is a potential infection risk. Follow local and national guidelines

**Packaging:**

Disposal must be made in accordance with local waste management regulations.

Non-contaminated packaging materials may be recycled. Contact your local service providers for further information.

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### 15. Transport information.

The product is not subject to transport regulations.

Product should be shipped with ice pack. A label should be affixed to the outside of the package - "Refrigerate Upon Arrival".

### 16. Regulatory information.

NA.

### 17. Other information.

The product is for in-vitro use only.

### 18. Disclaimer.

The information above is believed to be accurate represents the best information currently available to us.

However we make no warranty of merchantability or any other warranty expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purpose. In no way shall the company be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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