SAFETY DATA SHEET

IMMULITE® 2000 Total Testosterone

SDS no.:

L2KTW2_6

1/18

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

5	
1.1 Product identifier	
Product name	: IMMULITE® 2000 Total Testosterone
Product code	: L2KTW2, L2KTW6, 10381190, 10381191
1.2 Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	Total Testosterone Reagent WedgeDiagnostic agents.Total Testosterone AdjustorsDiagnostic agents.
Restrictions on use	For professional users only.
Supplier	 Siemens Healthcare Diagnostics Limited Park View, Watchmoor Park, Camberley, Surrey, GU15 3YL United Kingdom Phone: +44 (0) 345 600 1955
e-mail address of person responsible for this SDS	: dx.msds.healthcare@siemens-healthineers.com

1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

SECTION 2: Hazards identification

Product definition :

: Total Testosterone Reagent Wedge Total Testosterone Adjustors Mixture Mixture

Classification according to UK CLP/GHS

Total Testosterone Reagent Wedge

Skin Sens. 1, H317

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements Hazard pictograms		
Signal word	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Warning No signal word.
Hazard statements	: Total Testosterone Reagent Wedge	H317 - May cause an allergic skin reaction.
	Total Testosterone Adjustors	No known significant effects or critical hazards.

Precautionary statements

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SECTION 2: Hazards identification

Prevention		Total Testosterone Reagent Wedge	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
		Total Testosterone Adjustors	Not applicable.
Response		Total Testosterone Reagent Wedge Total Testosterone Adjustors	 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. Not applicable.
Storage	-	Total Testosterone Reagent Wedge	Not applicable.
•		Total Testosterone Adjustors	Not applicable.
Disposal		Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not applicable. Not applicable.
Supplemental label	:	Total Testosterone Reagent Wedge	Not applicable.
elements		Total Testosterone Adjustors	Not applicable.
		•	
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not applicable. Not applicable.
2.3 Other hazards			
Product meets the criteria for PBT or vPvB according to Regulation (EC) No.	:	Total Testosterone Reagent Wedge	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
1907/2006, Annex XIII		Total Testosterone Adjustors	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification		Total Testosterone Reagent Wedge Total Testosterone Adjustors	None known. None known.
Additional information	:	Potentially biohazardous material.	
		Sodium azide may react with lead or copported azides.	er plumbing to form highly explosive metal

SECTION 3: Composition/information on ingredients

3.1 Substances :	Total Testosterone Reagent W Total Testosterone Adjustors	edge Mixture Mixture		
Product/ingredient name	Identifiers	%	Classification	Туре
Total Testosterone Reagent Wedge				
aminocaproic acid	EC: 200-469-3 CAS: 60-32-2	≤3	Eye Irrit. 2, H319	[1]
3(2H)-Isothiazolone, 2-methyl-	EC: 220-239-6 CAS: 2682-20-4	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH071	[1]
zinc chloride	EC: 231-592-0	<0.01	Acute Tox. 4, H302	[1] [2]
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CTION 3: Composition/information on ingredients		
	CAS: 7646-85-7 Index: 030-003-00-2	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)
		See Section 16 for the full text of the H statements declared above.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid	measures	
Eye contact	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs. Immediately flush eyes with plenty of
		water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Total Testosterone Reagent Wedge	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth- to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Total Testosterone Adjustors	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Total Testosterone Reagent Wedge	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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SECTION 4: First aid	d measures	
	Total Testosterone Adjustors	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Total Testosterone Reagent Wedge	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Wash out mouth with water. If material
		has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	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. No action shall be taken involving any personal risk or without suitable training.
4.2 Most important symptor	ns and effects, both acute and delayed	
<u>Over-exposure signs/symp</u>	<u>otoms</u>	
Eye contact	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	No specific data. No specific data.
Inhalation	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	No specific data. No specific data.
Skin contact	: Total Testosterone Reagent Wedge	Adverse symptoms may include the following: irritation redness
	Total Testosterone Adjustors	No specific data.
Ingestion	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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Notes to physician	: Total Testosterone Reagent Wedge	In case of inhalation of decomposition
		products in a fire, symptoms may be
		delayed. The exposed person may need
		to be kept under medical surveillance for
		48 hours.
	Total Testosterone Adjustors	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled
Specific treatments	: Total Testosterone Reagent Wedge	No specific treatment.
•	Total Testosterone Adjustors	No specific treatment.
	Total Testosterone Reagent Wedge	Not available.
	Total Testosterone Adjustors	Not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.
5.2 Special hazards arising	from	the substance or mixture
Hazards from the substance or mixture	:	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	:	Decomposition products may include the following materials: phosphorus oxides halogenated compounds metal oxide/oxides
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and material for containment and cleaning up		

Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop
	up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry
	material and place in an appropriate waste disposal container. Dispose of via a
	licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	 Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Not available.
Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name			Exposure limit values			
Total Testosterone Reagent W zinc chloride	/edge	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 2 mg/m³ 15 minutes. Form: Fume TWA: 1 mg/m³ 8 hours. Form: Fume				
procedures	atmosphere of the ventila protective ec standards.	or biological monitoring tion or other control mo juipment. Reference s Reference to national g	with exposure limits, perso g may be required to deterr easures and/or the necess hould be made to appropri- uidance documents for me nces will also be required.	nine the effective ity to use respirat ate monitoring		
<u>DNELs/DMELs</u>						
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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Total Testosterone Reagent Wedge					
3(2H)-Isothiazolone, 2-methyl-	DNEL	Long term Inhalation	0.021 mg/ m³	General population	Local
	DNEL	Long term Inhalation	0.021 mg/ m³	Workers	Local
	DNEL	Long term Oral	0.027 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.043 mg/ m ³	General population	Local
	DNEL	Short term Inhalation	0.043 mg/ m ³	Workers	Local
	DNEL	Short term Oral	0.053 mg/ kg bw/day	General population	Systemic
zinc chloride	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.25 mg/m ³	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls	
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection meas	ures
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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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/personal protection

Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
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 and chemical properties

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The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Total Testosterone Reagent Wedge Liquid. Total Testosterone Adjustors Liquid.
Colour	: Total Testosterone Reagent Wedge Colourless. Total Testosterone Adjustors Colourless.
Odour	: Total Testosterone Reagent Wedge Odourless. Total Testosterone Adjustors Bland.
Odour threshold	: Not relevant/applicable due to nature of the product.
Melting point/freezing point	: Not relevant/applicable due to nature of the product.
Softening point	: Not relevant/applicable due to nature of the product.
Sublimation temperature	: Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range	: Total Testosterone Reagent Wedge Not available. Total Testosterone Adjustors Not available.
Flammability (solid, gas)	: Total Testosterone Reagent Wedge Not relevant/applicable due to nature of the product.
	Total Testosterone Adjustors Not relevant/applicable due to nature of the product.
Upper/lower flammability or explosive limits	: Total Testosterone Reagent Wedge Not available. Total Testosterone Adjustors Not available.
Flash point	: Total Testosterone Reagent Wedge Total Testosterone Adjustors [Product does not sustain combustion.] [Product does not sustain combustion.]

Auto-ignition temperature

	Ingredient name			°C	°F	Method
	Total Testosterone Reagent Wedge					
	magnesium di(acetate)			310	590	EU A.16
	Total Testosterone Adjustors					
	sodium azide			309	588.2	EU A.16
D	ecomposition temperature	:	Not relev	vant/applicable due	e to nature of the	product.
р	Н	:		stosterone Reager stosterone Adjusto		′5 to 6.85 t applicable.
V	iscosity	:		estosterone Reager estosterone Adjusto	•	t available. t available.
S	olubility(ies) Not available.	:				
S	olubility in water	:	Not relev	vant/applicable due	e to nature of the j	product.
N	liscible with water	:	Not relev	vant/applicable due	e to nature of the	product.
	artition coefficient: n-octanol/ vater	:	Not relev	vant/applicable due	e to nature of the _l	product.
v	apour pressure	:				
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SECTION 9: Physical and chemical properties

	Va	pour Pressu	re at 20°C	Vapour pressure at 50		
Ingredient name	nm Hg	kPa	Method	mm Hg	kPa	Method
Total Testosterone Reagent Wedge						
potassium 0 dihydrogenorthophosphate		0				
Total Testosterone Adjustors						
sodium azide 0	.0075	0.001				
vaporation rate	: Not	elevant/appli	cable due to nature	of the proc	luct.	•
Relative density		l Testosteron I Testosteron	e Reagent Wedge e Adjustors	1 1		
Density		l Testosteron l Testosteron	e Reagent Wedge e Adjustors		ailable. ailable.	
/apour density		l Testosteron l Testosteron	e Reagent Wedge e Adjustors		ailable. ailable.	
xplosive properties		l Testosteron I Testosteron	e Reagent Wedge e Adjustors		ailable. ailable.	
Oxidising properties		l Testosteron I Testosteron	e Reagent Wedge e Adjustors		ailable. ailable.	
Particle characteristics			-			
Median particle size	: Not a	applicable.				
2 Other information						
ire point		l Testosteron l Testosteron	e Reagent Wedge e Adjustors		ailable. ailable.	
Burning time	: Not	elevant/appli	cable due to nature	e of the prod	luct.	
undamental burning velocity	: Not	elevant/appli	cable due to nature	e of the prod	luct.	
Burning rate	: Not	elevant/appli	cable due to nature	e of the prod	luct.	
ADT	: Not	elevant/appli	cable due to nature	e of the prod	luct.	
APT	: Not	elevant/appli	cable due to nature	e of the proc	luct.	
leat of reaction	: Not	elevant/appli	cable due to nature	of the proc	luct.	
leat of combustion			cable due to nature	-		
low time (ISO 2431)		• •	cable due to nature	•		
Nolecular weight			cable due to nature			
ECTION 10: Stability						

10.2 Chemical stability	: The product is stable.	
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occu	ur.
10.4 Conditions to avoid	: No specific data.	
10.5 Incompatible materials	: No specific data.	
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition produshould not be produced.	cts

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Total Testosterone Reagent Wedge zinc chloride	LD50 Oral	Rat	350 mg/kg	-
Conclusion/Summary	 Total Testosterone Reagent We Total Testosterone Adjustors 	-	available. available.	

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Total Testosterone Reagent Wedge 3(2H)-Isothiazolone, 2-methyl- zinc chloride	100 350	300 N/A	N/A N/A	0.5 N/A	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Total Testosterone Reagent Wedge					
aminocaproic acid	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
zinc chloride	Skin - Severe irritant	Rabbit	-	120 hours 1 %	-

Conclusion/Summary

e en el a el a el anna el g		
Skin	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Eyes	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Respiratory	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Sensitisation		
Conclusion/Summary		
Skin	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Respiratory	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Mutagenicity		
Conclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Carcinogenicity		
Conclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Reproductive toxicity		
Conclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Teratogenicity		
Conclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Specific target organ toxic	ity (single exposure)	

Specific target organ toxicity (single exposure)

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Product/ing	redient name	Category	Route of exposure	Target organ
Total Testosterone Reage zinc chloride	nt Wedge	Category 3	-	Respiratory trac
Specific target organ toxici	ty (repeated exposure)			
Not available.				
Aspiration hazard Not available.				
formation on likely routes f exposure	: Total Testosterone Reager Total Testosterone Adjusto		Not available. Not available.	
otential acute health effects	-			
Eye contact	: Total Testosterone Reager	nt Wedge	No known significan hazards.	t effects or critica
	Total Testosterone Adjusto	rs	No known significan hazards.	t effects or critica
nhalation	: Total Testosterone Reager	nt Wedge	No known significan hazards.	t effects or critica
	Total Testosterone Adjusto	rs	No known significan hazards.	t effects or critica
Skin contact	: Total Testosterone Reager Total Testosterone Adjusto		May cause an allerg No known significan hazards.	
Ingestion	: Total Testosterone Reager	-	No known significan hazards.	
	Total Testosterone Adjusto	rs	No known significan hazards.	t effects or critica
ymptoms related to the phy	vsical, chemical and toxicolog	ical character	istics	
Eye contact	: Total Testosterone Reager Total Testosterone Adjusto		No specific data. No specific data.	
Inhalation	: Total Testosterone Reager Total Testosterone Adjusto	rs	No specific data. No specific data.	
Skin contact	: Total Testosterone Reager	nt Wedge	Adverse symptoms following: irritation redness	may include the
	Total Testosterone Adjusto		No specific data.	
Ingestion	: Total Testosterone Reager Total Testosterone Adjusto		No specific data. No specific data.	
elayed and immediate effect	ts as well as chronic effects	from short and	l long-term exposur	<u>'e</u>
<u>Short term exposure</u>				

<u>Short term exposure</u>		
Potential immediate effects	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Potential delayed effects	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Long term exposure		
Potential immediate effects	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Potential delayed effects	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Potential chronic health effo	ects	

SECTION 11: Toxicological information

Not available.

Not available.		
Conclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
General	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. No known significant effects or critical hazards.
Carcinogenicity	: Total Testosterone Reagent Wedge	No known significant effects or critical hazards.
	Total Testosterone Adjustors	No known significant effects or critical hazards.
Mutagenicity	: Total Testosterone Reagent Wedge	No known significant effects or critical hazards.
	Total Testosterone Adjustors	No known significant effects or critical hazards.
Reproductive toxicity	: Total Testosterone Reagent Wedge	No known significant effects or critical hazards.
	Total Testosterone Adjustors	No known significant effects or critical hazards.
Interactive effects	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Toxicokinetics		
Absorption	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Distribution	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Metabolism	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Elimination	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Other information	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Total Testosterone Reagent Wedge			
3(2H)-Isothiazolone, 2-methyl-	Acute EC50 0.18 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 0.07 ppm Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
zinc chloride	Acute EC50 34 µg/l Fresh water	Algae - Green algae - Chlorella vulgaris - Exponential growth phase	72 hours
	Acute EC50 26 µg/l Marine water	, Algae - Diatom - Navicula incerta	96 hours
	Acute EC50 1.8 mg/l Fresh water	Aquatic plants - Lesser Duckweed - Lemna aequinoctialis	96 hours
	Acute EC50 100 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 49.99 µg/l Fresh water	Crustaceans - Water flea - Moina irrasa - Neonate	48 hours
	Acute LC50 0.027 mg/l Marine water	Fish - Sand Flounder - Limanda punctatissima - Pre-larvae	96 hours
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	Chronic NOEC 20 µg/l Marine water	Algae - Green algae - Chlorella	72 hours
		sp Exponential growth phase	
	Chronic NOEC 1000 µg/l Fresh water	Crustaceans - Red swamp crayfish - Procambarus clarkii - Intermolt	21 days
	Chronic NOEC 80 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 31.5 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	30 days
onclusion/Summary	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.	

12.3	2	Persistence	and	degradability
			unu	acgradusmity

Conclusion/Summary	: Total Testosterone Reagent Wedge	Not available.
-	Total Testosterone Adjustors	Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Total Testosterone Reagent Wedge			
aminocaproic acid	-2.95	-	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.
Mobility	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not available. Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	
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 non-recyclable 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	: The classification of the product may meet the criteria for a hazardous waste.
	Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.
Packaging	
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.
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.
Date of issue/Date of revision	: 12/13/2022 Date of previous issue : No previous validation Version : 1 13/18

SECTION 14: Transport information

ADR/RID		
14.1 UN number	Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not regulated. Not regulated.
14.2 UN proper shipping name	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.3 Transport hazard class(es)	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.4 Packing group	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.5 Environmental hazards	Total Testosterone Reagent Wedge Total Testosterone Adjustors	No. No.
Additional information	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
ADN		
14.1 UN number	Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not regulated. Not regulated.
14.2 UN proper shipping name	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.3 Transport hazard class(es)	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.4 Packing group	Total Testosterone Reagent Wedge Total Testosterone Adjustors	:
14.5 Environmental hazards	Total Testosterone Reagent Wedge Total Testosterone Adjustors	No. No.
Additional information	Total Testosterone Reagent Wedge Total Testosterone Adjustors	:
IMDG		
14.1 UN number	Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not regulated. Not regulated.
14.2 UN proper shipping name	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.3 Transport hazard class(es)	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.4 Packing group	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.5 Environmental hazards	Total Testosterone Reagent Wedge Total Testosterone Adjustors	No. No.
Additional information	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
IATA		

SECTION 14: Transport information

	-	
14.1 UN number	Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not regulated. Not regulated.
14.2 UN proper shipping name	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.3 Transport hazard class(es)	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.4 Packing group	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.5 Environmental hazards	Total Testosterone Reagent Wedge Total Testosterone Adjustors	No. No.
Additional information	Total Testosterone Reagent Wedge Total Testosterone Adjustors	-
14.6 Special precaut user	ions for : Total Testosterone Reagent Wedge	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
	Total Testosterone Adjustors	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulkNot applicable.according to IMOinstruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB) /REACH</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC) Not listed.

Persistent Organic Pollutants Not listed.

SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not applicable. Not applicable.
Seveso Directive		
This product is not controlled	under the Seveso Directive.	
EU regulations		
Industrial emissions (integrated pollution prevention and control) - Air	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not listed Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Total Testosterone Reagent Wedge Total Testosterone Adjustors	Not listed Not listed
International regulations		
Montreal Protocol		
Not listed.		
Stockholm Convention on F Not listed.	Persistent Organic Pollutants	
Rotterdam Convention on F Not listed.	Prior Informed Consent (PIC)	
UNECE Aarhus Protocol on Not listed.	POPs and Heavy Metals	
15.2 Chemical safety assessment	: Not applicable.	
SECTION 16: Other i	nformation	

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
-	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Total Testosterone Reagent Wedge	
Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

IMMULITE® 2000 Total Testosterone

SECTION 16: Other information

Total	
Testosterone	
Reagent	
Wedge	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications

Total Testosterone	
Reagent Wedge	
Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	: 12/13/2022
Date of issue/ Date of	: 12/13/2022
revision	
Date of previous issue	e : No previous validation
Version	: 1
Notice to reader	

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

IMMULITE® 2000 Total Testosterone