

## Risk Assessment iaw EN ISO 14971:2000 Annex D: Possible hazards with medical devices.

Ref.	Hazard.	Related part / Component posing risk.	Sev of Haz.	Like of Haz.	Risk.	Solution.	Document referenced.	Sev of	Like Of	Risk
D.2	Energy hazards and cor	ntributory factors	Haz.	Haz.				Haz.	Haz.	
D.2.1	Electricity	MA								
D.2.2	Heat	NA								
D.2.3	Mechanical force	NA								
D.2.4	Ionising radiation	NA								
D.2.5	Non ionising radiation	NA								
D.2.6	Moving parts	NA								
D.2.7	Unintended motion	NA								
D.2.8	Suspended masses	NA								
0.2.9	Patient support failure	NA								
0.2.10	Pressure (vessel rupture)	NA								
0.2.11	Acoustic pressure	NA								
	Vibration	NA								
0.2.13	Magnetic fields			-						
	(eg. MRI)	NA	1							
).3	Biological hazards and co	ontributory factors		1980 1980						
).3.1	B10-contamination	1	MILESCAL DEL CHES							
).3.2	Bio-incompatibility	1					26			
0.3.3	Incorrect formulation	A . 1A					Z6			
	(chemical composition)	NA					<b>Z</b> 6			
.3.4	Toxicity	NA								
	Allergenicity	MA					26	~		
	Mutagenicity	NA					21			
	Oncogenicity	NA								
.3.8	Carcinogenicity	NA								
.3.9	Re and/or cross infection	NA								

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D 3 10	0 Pyrogenicity	4.40								
D 3 11	I Inability to maintain	NA								
	hygienic standards	NA								
D.3.12	2 Degradation	NA								
<b>D.4</b>	Environmental hazards	and contributory	factors							
D.4.1	Electromagnetic fields	NA	THE COLD	BAR ARE BUILDING						
D.4.2	Susceptibility to	100	-							
	electromagnetic									
	interference	NA								
D.4.3	Emissions of									
	electromagnetic	1000								
	interference	WA								
D.4.4	Inadequate supply of									
	power	NA								
D.4.5	Inadequate supply of		+							
	coolant	NA								
D.4.6	Storage / operation									
	outside prescribed	NA								
	environmental conditions	IV IT								
D.4.7	Incompatibility with									
	other devices with which									
	the product is intended to	NA								
	be used									
	Accidental mechanical	A A A								
	damage	NA					1	1	-	
	Contamination due to									
1	waste products and/or	NA								
	device disposal	•								
D.5 1	Hazards resulting from in	correct output of	energy and	substanc	es					
J.J.1 1	Eleculotty	WA								
	Radiation	1								
	Volume	NA								
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Det	P								
D.5.4	Pressure	NA							
D.5.5	Supply of medical gases	NA						 	
D.5.6	Supply of anaesthetic	440						 	
	agents	NA							
<b>D.6</b>	Hazards related to the u	ise of the medical d	evice and con	ntributor	y factors			Na illustration of the state of	ENGLISHED
D.6.1	Inadequate labelling	NA			y ractors				
D.6.2	Inadequate operating								
	instructions	M24? 1							
D.6.3	Inadequate specification	. /							
	of accessories	NA							
D.6.4	Inadequate specification								
	of pre-use checks	N/A							
D.6.5	Over-complicated					-			
	operating instructions	NA							
D.6.6	Inadequate specification			_					
	of service and	n//1.							
	maintenance	NA							
D.6.7	Use by unskilled /	1 /A							
	untrained personnel	N/A N/A N/A							
D.6.8	Reasonable foreseeable	1/1							
	misuse	N/H							
D.6.9	Insufficient warning of	41/1							
	side effects	IV /M							
D.6.10	Inadequate warnings of	. /						 	
	hazards likely with re-	WA							
	use of single use devices								
	Incorrect measurement	. /.							
	and other metrological	11/16							
	aspects	10 /10							
D.6.12	Misrepresentation of	11/1						 	
	results	IV IM							
	Incompatibility with							_	
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	consumables /								
	accessories / other	NA							
	devices	IV LOT							
D.6.14	Sharp edges or points	W/A							
<b>D.7</b>	Inappropriate, inadequ	rate or overcomplica	ited user in	terface (n	an/maahina				
D.7.1	Mistakes & judgement		de de de la constante de la co	ici iace (ii	ian/macmine	communication	on)		
	errors	N/A							
D.7.2	Lapses and cognitive	1							
	recall errors	N/A							
D.7.3	Slips & blunders (mental	1							
	or physical)	NA							
D.7.4	Violation or abbreviation	/							
	of instructions,	1 10							
	procedures etc	NA							
D.7.5	Complex or confusing	1/1							
	control system	NA							
D.7.6	Ambiguous or unclear	15/1							
	device state	N/A							
0.7.7	Ambiguous or unclear	/							
	presentation of settings,	1 /1							
	measurement, or other	IN IN							
	information								
0.7.8	Misrepresentation of	0/1							
	results	IV JA							
0.7.9	Insufficient visibility,	0/1							
	audibility or tactility	IV (H							
0.7.10	Poor mapping of controls	1							
t	to action or of displayed	1/10							
li	information to actual	IV //I							
	state	1							
.7.11	Controversial modes or	1/1/1							
n	nappings as compared to	IV (A							
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	existing equipment							
<b>D.8</b>	Hazards arising from f	unction failure, maint	enance and age	ing and contrib				
D.8.1	Erroneous data transfer	NA	enance and age	and contribut	ory factors		70.7	
D.8.2	Lack of, or inadequate	,						
	specification for							
	maintenance including							
	post maintenance	N/14						
	functional tests	10 110						
D.8.4	Inadequate maintenance	N/A						
D.8.5	Lack of adequate	,						
	determination of end of	N/M						
	device life	11/17					1	
D.8.6	Loss of electrical	Alla						
	integrity	NA						
D.8.7	Loss of mechanical	N/A						
Doo	integrity	IV IT						
D.8.8	Inadequate packaging	. /						
	(contamination and / or	1/1						
	deterioration of the	//t						
	device)	,						
	Re-use and/or improper	N/A						
	Deterioration in function	(11						
D.6.10	(gradual analysis of	. ,						
	(gradual occlusion of	V/A						
	fluid / gas path or change in resistance to flow,	/ <b>n</b>						
	electrical conductivity)	,						
	as a result of repeated							
- 1	use							
	450							

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