## Graseby MS26 Syringe Driver

# Competency Checklist

**SINS** GRASEBY

Published by SIMS Graseby Ltd

#### © SIMS Graseby Ltd 1998

No part of this publication may be reproduced, transmitted, transcribed, or stored in a retrieval system or translated into any human or computer language in any form by any means without the prior permission of SIMS Graseby Ltd.

SIMS Graseby Ltd Colonial Way WATFORD Herts WD2 4LG

Tel: (+44) (0)1923 246434 Fax: (+44) (0)1923 231595

Registered in England No. 995550

#### GRASEBY MS26 SYRINGE DRIVER COMPETENCY CHECK LIST - STAGE 1/LEVEL 1

Name:	 Title:

Hospital/Dept: ...... Expected date of completion: .....

© SIMS Graseby Ltd 1998

Competency Statement: Participant will demonstrate proper practical knowledge, theory of operation and clinical application of the Graseby MS26 Syringe Driver

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
The participant will be able to:				
1. Demonstrate pre-operational inspection and proper set-up of the MS26				
a) Define the type of pump utilised, and explain the difference between an MS26 and MS16A.	a) Questioning	a)	a)	a)
b) Define the application for usage of this Syringe Driver.	b) Questioning	b)	b)	b)
<ul> <li>c) Identify the components on the Syringe driver that secures the syringe and explain their function.</li> </ul>	c) Direct observation/Questioning	C)	с)	с)
d) Install the battery.	d) Direct observation	d)	d)	d)
e) Explain why the alarm sounds when the battery is inserted.	e) Questioning	e)	e)	e)
<ul> <li>f) Demonstrate the motor safety circuits are operating by holding down the Start/Boost button.</li> </ul>	f) Direct observation	f)	f)	f)
g) Explain the function of the boost facility and how much the plunger is advanced with each boost.	g) Questioning	g)	g)	g)
<ul> <li>Demonstrate administration of a bolus by utilising the boost facility.</li> </ul>	h) Direct observation	h)	h)	h)
i) Explains which sizes of syringe can be used.	i) Questioning	i)	i)	i)
<ul> <li>Connect the syringe to the infusion line and explains why a luer lock syringe should be used.</li> </ul>	j) Direct observation/Questioning	j)	j)	])
k) Prime the infusion line.	k) Direct observation	k)	k)	k)

### GRASEBY MS26 SYRINGE DRIVER COMPETENCY CHECK LIST - STAGE 1/LEVEL 2

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
The participant will be able to:				
2. Demonstrate the ability to operate the MS26				
<ul> <li>Measure the syringe fluid length against the scale on the Syringe driver.</li> </ul>	a) Direct observation	a)	a)	a)
b) State the type of unit measurement that is utilised.	b) Questioning	b)	b)	b)
c) Explain why this type of unit of measurement is utilised.	c) Questioning	C)	c)	с)
<ul> <li>d) Calculate and set the infusion rates for the following periods:</li> <li>i) 1 day.</li> <li>ii) 2 days.</li> <li>iii) 5 days.</li> </ul>	d) Direct observation i) ii) iii)	d)	d)	d)
e) Insert the syringe.	e) Direct observation	e)	e)	e)
f) Fit plastic cover if utilised.	f) Direct observation	f)	f)	f)
g) Start the infusion.	g) Direct observation	g)	g)	g)
h) Explain what the indicator light shows.	h) Questioning	h)	h)	h)
i) Stop the infusion.	i) Direct observation/Questioning	i)	i)	i)
3. Monitoring an infusion in progress				
<ul> <li>Measure the length of fluid in the syringe whilst secured on the Syringe driver using an appropriate rule or gauge.</li> </ul>	a) Questioning	a)	a)	a)
<ul> <li>b) Chart the remaining fluid length and give a brief estimate of the Infusion Time remaining.</li> </ul>	b) Direct observation/Questioning	b)	b)	b)

© SIMS Graseby Ltd 1998

### GRASEBY MS26 SYRINGE DRIVER COMPETENCY CHECK LIST - STAGE 1/LEVEL 3

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
The participant will be able to:				
4. Review MS26 maintenance/trouble shooting considerations and appropriate action				
a) Review care and cleaning of the Syringe Driver.	a) Questioning	a)	a)	a)
b) Review battery life and type.	b) Questioning	b)	b)	b)
c) Explain possible causes for the following:	c)	с)	с)	с)
i) The infusion ended early.	i) Questioning	i)	i)	i)
ii) The infusion has ended late.	ii) Questioning	ii)	ii)	ii)
iii) The Infusion has stopped.	iii) Questioning	111)	iii)	iii)
iv) The Syringe Driver will not start.	iv) Questioning.	iv)	iv)	iv)
<ul> <li>v) The infusion has completed, but the motor is still running. The indicator light still flashes and there is a periodic click.</li> </ul>	v) Questioning.	v)	V)	iv)
vi) The indicator light is no longer flashing but the motor runs.	vi) Questioning	Vi)	vi)	V)
<ul> <li>d) State the conditions which will cause the syringe driver to alarm.</li> </ul>	d) Questioning	d)	d)	d)

© SIMS Graseby Ltd 1998

### GRASEBY MS16A SYRINGE DRIVER COMPETENCY CHECK LIST - STAGE 1

ſ	Comments: Level 1
	Level 2
SIMIS ©	
S Graseby Ltd	
1998	
-	Level 3
	Signature of Assessor:

Signature of Participant: ..... Date: .....

### GRASEBY MS26 SYRINGE DRIVER ASSESSOR'S PERFORMANCE CRITERIA COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 1

Performance Criteria			ended Answer/Outcome
The participant will be able to:			
1.	Demonstrate pre-operational inspection and proper set-up of MS26		
a)	Define the type of pump utilised and explain the difference between an MS26 and MS16A.	a)	The MS26 is SIMS Graseby's <b>DAILY</b> rate Syringe Driver and is intended for administrations over periods of 24 hours or more. The MS16A is the <b>HOULY</b> rate Syringe Driver, is faster, and is intended for administrations up to 24 hours.
b)	Define the application for usage of the Syringe driver.	b)	Defines the area of application the Syringe driver is being used for i.e. Terminal Care, Heparin or Chemotherapy.
c)	Identify the components on the Syringe driver that secures the syringe and explain their function.	c)	Identifies the components and explains their function. Securing strap to retain syringe in place. Slot in case to retain syringe barrel finger grip. Finger on actuator to retain syringe plunger.
d)	Install battery.	d)	Installs battery correctly.
e)	Explain why alarm sounds when battery is inserted.	e)	This indicates correct/normal position.
f)	Demonstrate the motor safety circuits are operating by holding down the Start/Boost button, and understands this.	f)	Currently demonstrates the procedure for checking that the motor safety circuits are operating and understands the reason for performing this.
g)	Explain the function of the boost facility and how much the plunger is advanced with each boost.	g)	Explains the function of the boost facility and how much the plunger travels with each boost. (bleeps every 0,23 mm).
h)	Demonstrate the administration by utilising the boost facility.	h)	Correctly performs proceedure for administering a bolus using the boost button.
i)	Connect the syringe to the infusion line.	i)	Performs correct procedure for connecting syringe to the infusion line.
j)	Identify sizes of syringes.	j)	Can use 5 ml, 10 ml, 20 ml, 30 ml, and 35 ml syringes.
k)	Prime the infusion line.	k)	Correctly performs procedure for priming the infusion line.

#### GRASEBY MS26 SYRINGE DRIVER ASSESSOR'S PERFORMANCE CRITERIA COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 2

Pe	rformance Criteria	Intended Answer/Outcome	
The participant will be able to:			
2.	Demonstrate the ability to operate the MS26		
a)	Measure the syringe fluid length against the scale on the Syringe driver	a) Correctly measures the fluid length in the syringe against the scale.	
b)	State the type of unit of measurement that is utilised.	b) Scale length measured in Millimetres.	
c)	Explain why this type of measurement is utilised.	c) This allows the Syringe Driver to accomodate different brands and sizes of syringe which have <u>different scale lengths for the same volume</u> .	
d)	Calculate and set the infusion rates for the following periods:	<ul> <li>d) Calculates and sets the infusion rates correctly i.e.</li> <li><u>Scale length measured in MILLIMETRES</u> TIME IN DAYS</li> </ul>	
		MS26 calibrated in mm/Day	
	i) 1 day.	i)	
	ii) 2 days	ii) — syringe measured	
	iii) 5 days.	in 2 a) iii)	
e)	Insert the syringe.	e) Inserts the syringe correctly.	
f)	Fits plastic cover if utilised.	f) Fits the plastic cover correctly if utilised.	
g)	Start the infusion.	g) Starts the infusion.	
h)	Explain what the indicator light shows.	<ul> <li>Flashes once every 25 seconds to show normal operation and battery has enough life in it to complete infusion.</li> </ul>	
i)	Stop the infusion.	<ul> <li>Knows how to stop the infusion <u>completely</u>, by removing syringe or removing battery and is aware that there is <u>no off</u> switch.</li> </ul>	Э
3.	Monitoring an infusion in progress		
a)	Measure the fluid in the syringe without removing it from the Syringe driver.	<ul> <li>a) Using an appropriate rule or gauge the participant must measure the fluid length in the syringe withor removing the syringe from the Syringe driver.</li> </ul>	t ut
b)	Chart the fluid length remaining and estimate the infusion time remaining.	<ul> <li>b) They must be able to accurately chart the fluid len remaining and assess the Infusion Time remaining</li> </ul>	ıgth J.

### GRASEBY MS26 SYRINGE DRIVER ASSESSOR'S PERFORMANCE CRITERIA COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 3

Performance Criteria		Intended Answer/Outcome
The participant will be able to:		
3.	Review MS26 maintenance/trouble shooting considerations and appropriate action	
a)	Review care and cleaning of the Syringe driver.	<ul> <li>a) Explains procedure for care and cleaning of the Syringe Driver. <u>Not to be immersed in any solution</u>. Is aware of the procedure if the Syringe Driver does get wet.</li> </ul>
b)	Review battery life and type.	<ul> <li>Alkaline 9V battery. Battery life approximately 50 full syringes.</li> </ul>
C)	Explain why the following occur:	c)
	i) The infusion has ended early.	i) Delivered dose too quickly because:
		<ul> <li>* Incorrect rate setting.</li> <li>* Scale length measured incorrectly.</li> <li>* Boost facility has been used.</li> </ul>
	ii) The infusion has ended late.	ii) Infusion ended late because:
		<ul><li>* Incorrect rate setting.</li><li>* Scale length measured incorrectly.</li></ul>
	iii) The infusion stopped.	iii) The infusion stopped because:
		<ul><li>* Blockage in the line.</li><li>* Battery exhausted.</li></ul>
	iv) The Syringe Driver will not start.	iv) The Syringe driver will not start because:
		<ul> <li>* Battery inserted incorrectly.</li> <li>* Battery exhausted.</li> <li>* Start/Boost button not depressed sufficiently.</li> </ul>
	<ul> <li>v) The infusion has completed but the motor is still running and there is no alarm. The indicator light still flashes and there is a periodic click.</li> </ul>	<ul> <li>v) The mechanism for pushing the syringe plunger has worn out and is slipping causing the click. This is therefore a fault and the unit should be returned to a qualified engineer.</li> </ul>
	vi) The indicator light is no longer flashing, but the motor runs.	vi) This is because the battery <u>needs replacing</u> .

### GRASEBY MS26 SYRINGE DRIVER ASSESSOR'S PERFORMANCE CRITERIA COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 3 cont . . .

SME100012-0011



SIMS Graseby Limited Colonial Way, Watford, Herts, UK, WD2 4LG Tel: (+44) (0)1923 246434 Fax: (+44) (0)1923 231595



Part No. TPF-00059-2 July 1996 © SIMS Graseby Ltd 1998