

Technical Report

<b>Customer</b>	Hemas	<b>Lab reference No.</b>	HC25/05/38
<b>Originated by</b>	Aniket Shishupal	<b>Date of issue</b>	12 05 2025
<b>Originator Ref. No.</b>	None	<b>Author</b>	Shraddha Kale
<b>Zone</b>	APAC	<b>Technician</b>	Ashwini Pawar

<b>Objective</b>	To recommend an additive for customers detergent
<b>Process</b>	Detergency
<b>Substrate</b>	EMPA fabric soiled with carbon black and olive oil
<b>Summary of the report</b>	Addition of Synperonic A11 improves the detergency of the Hemas detergent

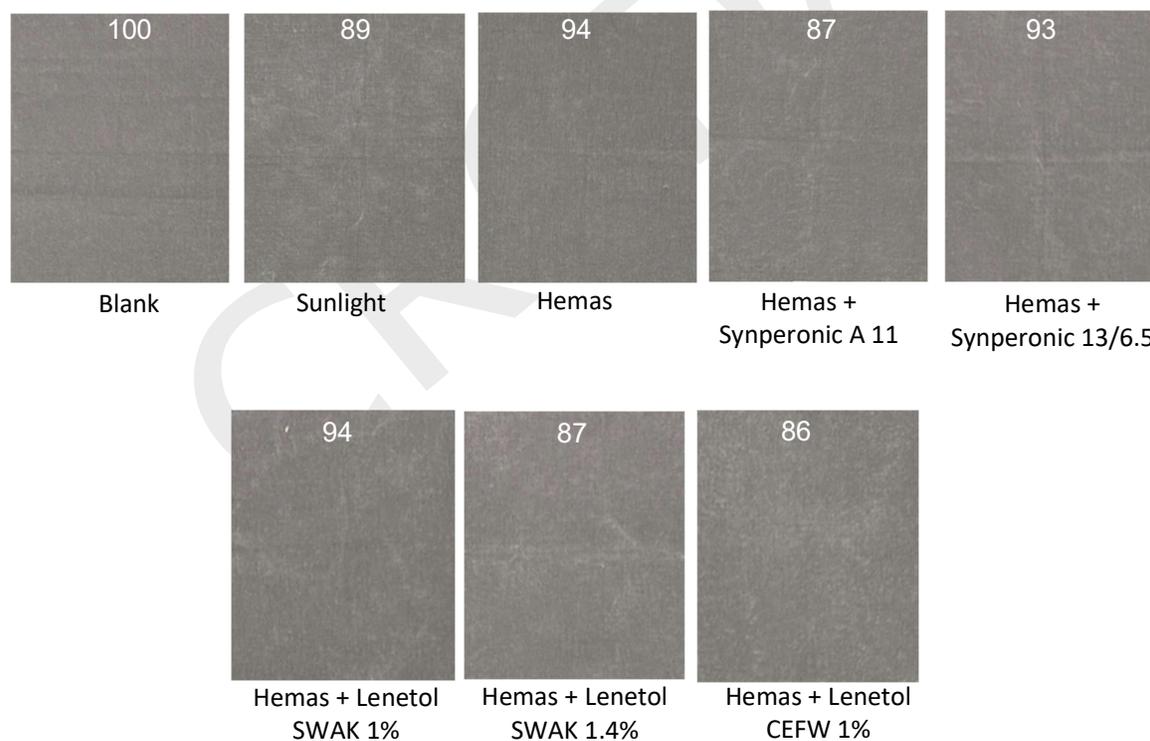
CRODA

## Technical Report

### Test Protocol for detergency test

<b>Equipment</b>	Laundrometer
<b>Water Hardness</b>	1000 ppm
<b>Test Fabrics</b>	EMPA fabric soiled with carbon black and olive oil
<b>Detergent</b>	Hemas and Sunlight detergent
<b>Detergent dosage</b>	4 gpl
<b>Additive dosage</b>	1% of the detergent
<b>Wash Conditions</b>	Temperature: 30°C MLR 1:50 Speed: 120 RPM Soak 15 min- Wash 15 min- Rinse
<b>Drying Condition</b>	Air dry

### Results – Detergency test



### Foam height- Cylinder method

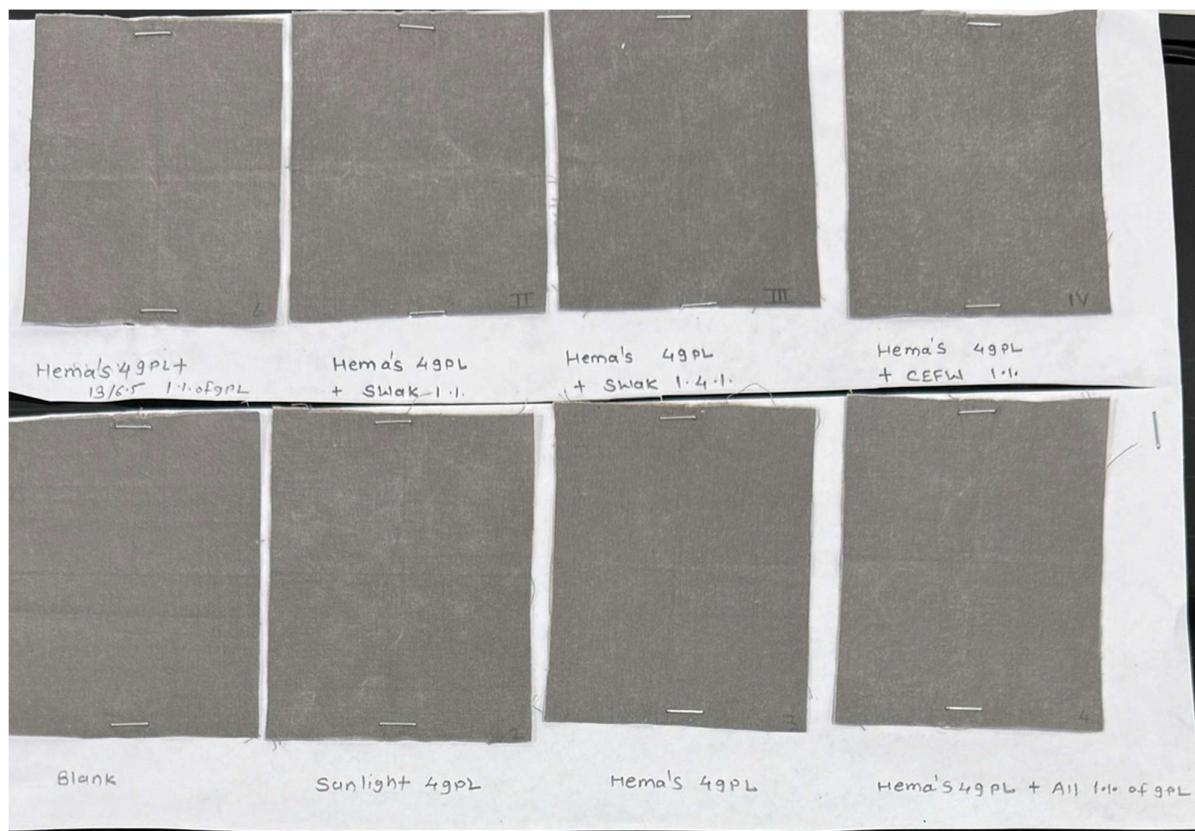
Detergents	Foam height	
	Immediate	After 30 sec
Sunlight 4 gpl	186ml.	164 ml.
Hemas detergent 4 gpl	164 ml.	164 ml.
Hemas detergent 4 gpl + Synperonic A11 1% of the detergent	164 ml.	164 ml.
Hemas detergent 4 gpl + Synperonic 13/6.5 1% of the detergent	130 ml.	130 ml.
Hemas detergent 4 gpl + Lenetol SWAK 1% of the detergent	164 ml.	164 ml.
Hemas detergent 4 gpl + Lenetol SWAK 1.4% of the detergent	154 ml.	154 ml.
Hemas detergent 4 gpl + Lenetol CEFW 1% of the detergent	158 ml.	158 ml.

Note: The foam height of sunlight drops after few seconds

### Conclusion

Addition of Synperonic A11 improves the detergency of the Hemas detergent and maintains the foam height.

## Technical Report



### Non-warranty

The information in this publication is believed to be accurate and is given in good faith but no representation or warranty as to its completeness or accuracy is made. Suggestions for uses or applications are only opinions. Users are responsible for determining the suitability of these products for their own particular purpose. No representation or warranty, expressed or implied, is made with respect to information or products including without limitation warranties of merchantability or fitness for a particular purpose or non-infringement of any third party patent or other intellectual property rights including without limit copyright, trademark and designs. Any trademarks identified herein are trademarks of the Croda group of companies.