



## Technical Data Sheet

### SupraCare™ 760 Additive

SupraCare™ 760 Additive is a multi-functional cellulosic derivative combining rheology and structuring benefits

#### Features & Benefits

- High thickening efficiency
- Derived from natural raw materials
- Inherent Ultimate biodegradable as per OECD 302B
- Highly tolerant to electrolytes
- Non-ionic: compatible with majority of raw materials typically used in a formulation
- Better rate of foam generation in laundry and multifunctional bars
- Improved binding and lower /mushiness in laundry and multifunctional bars
- Controlled release in the toilet cistern blocks

#### Composition

- Cellulosic derivative

#### Applications

SupraCare™ 760 Additive is suitable for the following application:

- Liquid laundry
- Hand dishwash liquid
- Hard surface cleaner
- Laundry bars / multi-purpose bars / non-soap detergent (NSD) bars

#### Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Appearance		White to off white powder
Solubility		Water soluble
Viscosity cps (2% Solution) Haake Roto Visco RV 100 Shear Rate 2.55 S <sup>-1</sup> , 20°C		7000–9000
Solution pH (1%)		6.0–7.0
Moisture Content, % Max	%	7

## Formulation Examples

### Accomplish Dish - Hand Dish Washing Gel

Material/ Supplier	% wt	Description
Marlon AS 3 / Sasol	7.0%	Surfactant - Sodium Alkylbenzene Sulfonate (90%)
Texapon N70 / BASF	3.0%	Surfactant - Sodium Lauryl Ether Sulfate (70%)
Empigen BS/FA / Huntsman	0.3%	Surfactant - Cocoamidpropylbetaine (30%)
ACUSOL™ 823 ER / Dow	0.3%	Rheology Modifier
ACUSOL™ 445N / Dow	1.2%	Dispersant
SupraCare™ 760 Additive / Dow	0.3%	Rheology Modifier
Sodium Hydroxide (40%)	~2.4%	Neutralizer – QS pH 8
Stepanate SXS-E (40% solution)/ Stepan	4%	Hydrortope - Sodium Xylene Sulfonate
Magnesium Sulfate	0.8%	Salt
Sodium Chloride	0.97%	Salt
Unicert Yellow 08005-J	0.2%	Dye
Givaudan – Lemon Boost	0.1%	Fragrance
Demin Water	~79%	QS 100%

#### Processing Instructions:

1. Take 60% of formulation water and add ACUSOL™ 823 ER under stirring.
2. Add LABSA under stirring. Mix well and adjust pH using NaOH to ~6.
3. Add SLES, Cocamidopropylbetaine and ACUSOL™ 445N under stirring.
4. Add NaOH (40%) to reach pH ~8.
5. Add Magnesium Sulfate dispersed in remaining water.
6. Add SupraCare™ 760 Additive and mix for 1 hour under 160 rpm till full dispersion and viscosity build up.
7. Add Sodium Xylene Sulfonate, Perfume, Dyes and Sodium Chloride. Mix well till homogeneous.

Properties	Result
Appearance	Clear yellow gel
Viscosity RV DVII CP52 20RPM	2300 cps
pH	~8

## Formulation Examples (Cont.)

### Soap in Scope - Soap Based Laundry Bars

Ingredients	Control	Soap in Scope
	60 TFM	55 TFM
	% by wt.	% by wt.
Soap Noodles (80:20) (75.5% Active)	79.5	72.5
Glycerin	5	1
SupraCare™ 760 Additive / Dow	0	0.75
Sodium Silicate (50%)	14	17.5
Microfine Talc	0	6.8
TiO <sub>2</sub>	0.75	0.2
Perfume	0.75	0.75
Color	0.01	0.01
Water	0	0.5
Total	100.0	100.0

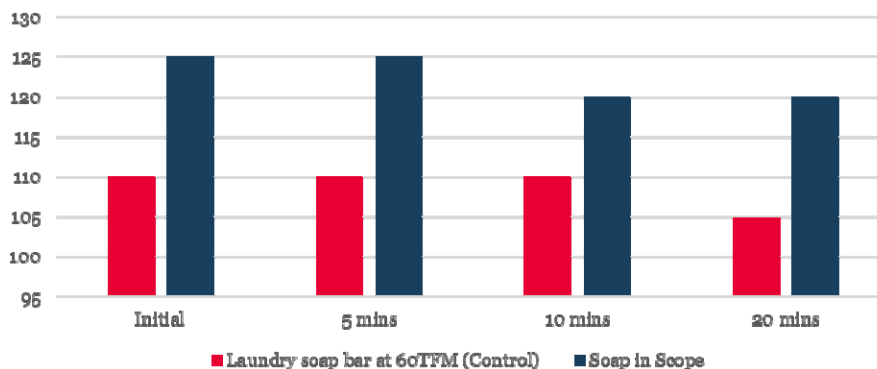
#### Processing Instructions:

##### Option 1: Ready Made Soap Noodle Based Bars

Charge soap noodle in the sigma mixer and crush them uniformly by mixing them for 15–20 min. Add SupraCare™ 760 Additive and mix it for 5 min. Add glycerin mix it for 2–3 min. Add sodium silicate mix it for 10 min. Add microfine talc mix it for 2–3 min. Add TiO<sub>2</sub> and mix it for 2–3 min. Add water if and when required under mixing. Add color mix it for 3–4 min (till the color develops in the dough). Add perfume and mix it for 1–2 min and then discharge it from the sigma mixer. Take the dough from the sigma mixer to the triple roll and then the mix from the triple roll mill to the extruder for plodding the bars.

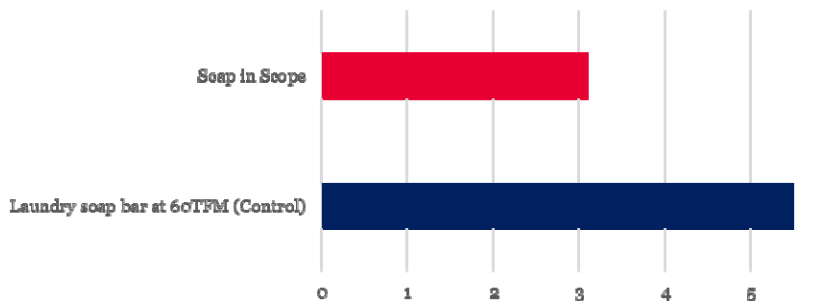
##### Option 2: In-situ Saponification Plant

The SupraCare™ 760 Additive can be mixed with the fatty acids and then saponified. In this case the soap noodles will have built in SupraCare™ 760 Additive. Rest of the unit operations remains same.



**Figure 1:** Foam Profiling @ 250 ppm Water Hardness

## Formulation Examples (Cont.)



**Figure 2:** Rate of Wear (Weight Loss in gms 4 Days)

## How to Use

SupraCare™ 760 Additive should be gradually added into aqueous solutions under continuous stirring to prevent lump formation. The typical use varies from 0.3–1% by weight.

## Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## Usable Life and Storage

Store product in tightly closed original container at temperatures recommended on the product label.

## Packaging Information

25 kg bags.

## Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, [dow.com](http://dow.com) or consult your local Dow representative.

## Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

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Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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