

Surfachem

# **SURFAsorb®**

**Odour  
Absorbers**



**Technical Brochure**

### Characteristics

- Water soluble
- Highly Active
- Capable of binding odour forming nucleophilic molecules by re-complexation

### Effective against odours

#### Sulphur containing molecules



Garlic



Cat urine

#### Nitrogen containing molecules



Ammonia



Tobacco /  
Nicotine

#### Other odours



Sweat



Animal  
Odour



Fire  
Damage



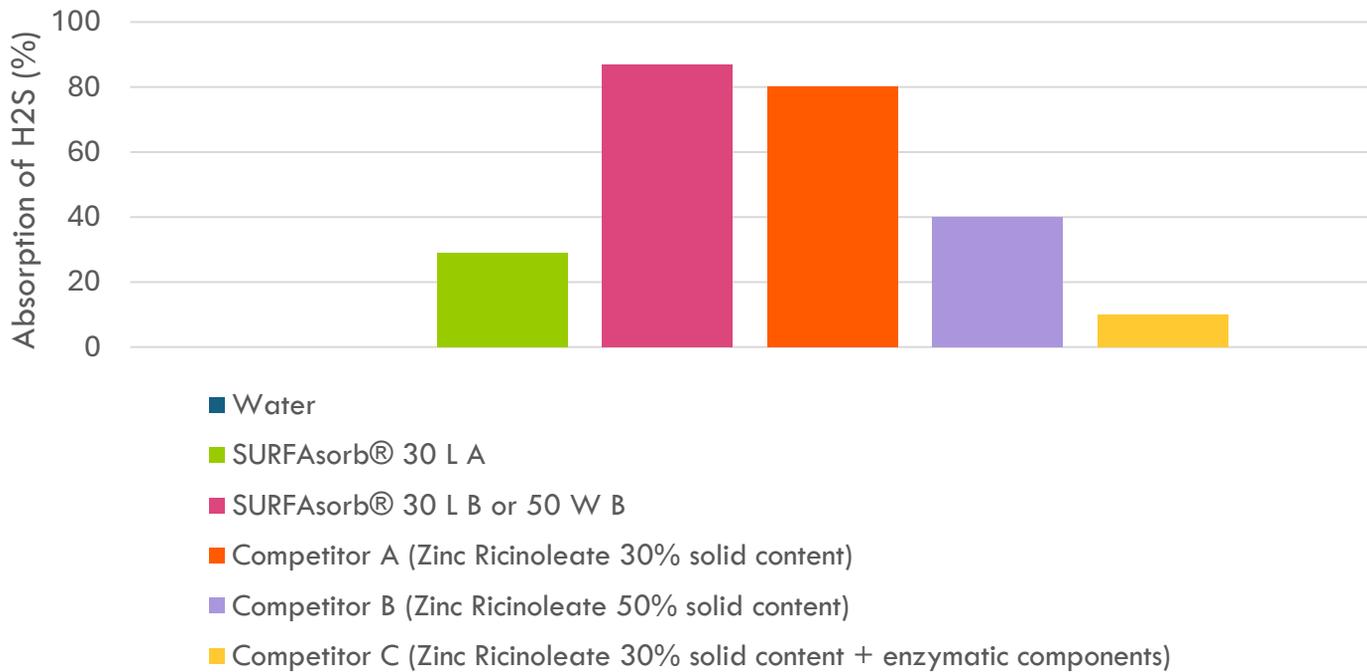
Cooking /  
Burnt



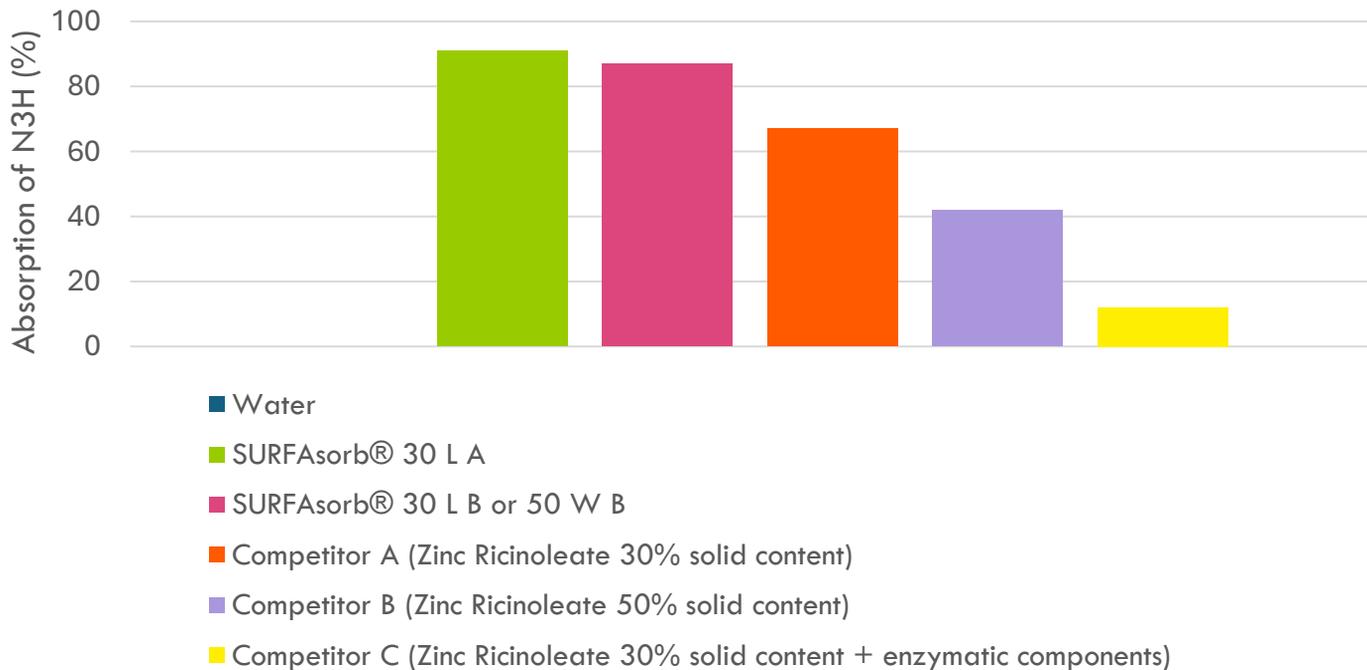
Rotting /  
Spoiled food

	<b>SURFAsorb® 25 LB Eco</b>	<b>SURFAsorb® 30 LB</b>	<b>SURFAsorb® 30 LA</b>	<b>SURFAsorb® 50 W B</b>	<b>SURFAsorb® 60 LA</b>	<b>SURFAsorb® 90 WP B Eco</b>	<b>SURFAsorb® 100 W</b>
<b>Formulation pH</b>	<7	>7	>7	>7	<7	>7	>8
<b>Product Specifics</b>	Can be used for EcoLabel, Ecocert, Nordic Swan			Stable at low temperature (no turbidity)		Stable at low temperatures, even below 0°C	Very good heat stability
<b>Form</b>	Liquid	Liquid	Liquid	Wax	Waxy powder	Waxy powder	Wax
<b>Active Matter (%)</b>	25	30	30	50	60	90	100
<b>Water Content (%)</b>	61 - 69	ca. 63	ca. 55	ca. 25	ca. 7	ca. 3	0
<b>Solvent</b>	Glutamic Diacetic Acid (GLDA)	Methyl Glycine Diacetic Acid (MGDA)	Ether Carboxylic Acid (ECA)	Methyl Glycine Diacetic Acid (MGDA)	Ether Carboxylic Acid	Glutamic Diacetic Acid (GLDA)	Undissolved (must be activated with heat or alcohol)
<b>Shelf life</b>	Minimum 12 Months	Minimum 12 months	Minimum 12 months	Minimum 24 months	Minimum 12 Months	Minimum 24 months	Minimum 24 months
<b>Application areas</b>	Air Care (air freshener, reed diffuser, plug-in, aerosol), alkaline toilet cleaners, industrial cleaners, kitchen cleaners, institutional cleaners, personal care products, laundry soaps and softeners, upholstery cleaning, etc.	Air Care (air freshener, reed diffuser, plug-in, aerosol), alkaline toilet cleaners, industrial cleaners, kitchen cleaners, institutional cleaners, laundry soaps and softeners, upholstery cleaning, etc.	Air conditioning systems, car air conditioning systems, acidic cleaners with odour absorbers. (eg toilet cleaners, decalcifiers), removing cigarette smoke odours off walls, animal cleaning, etc.	Air Care (air freshener, reed diffuser, plug-in, aerosol), alkaline toilet cleaners, industrial cleaners, kitchen cleaners, institutional cleaners, laundry soaps and softeners, upholstery cleaning, etc.	For almost waterfree formulations in the area of air conditioning systems, car air conditioners, acidic cleaners with odour absorbers (eg toilet cleaners, decalcifiers). etc.	For almost anhydrous formulations including; powder detergents, dumps, biotics, etc.	For almost anhydrous formulations including; personal care products, powder eco-detergents, organic waste, dumps, etc.

## Absorption tests results - after 10 minutes



## Absorption tests results - after 10 minutes



All formulations tested with same active content

## Example Home Care Formulations

### Carpet Cleaner

INGREDIENT	DESCRIPTION	Function
DI WATER	Aqua	Diluent
PROTECTOL® BN	Bronopol	Preservative
SURFAC® GLDA	Glutamate Diacetate NA4	Chelating Agent
SURFAC® BH40 LF	Disodium 2-Ethylhexyl Dipropionate	Surfactant
ECOREMOVER®	Blend	Surfactant
NEODOL 91-6	C9-11 Alcohol Ethoxylate	Surfactant
SURFASORB 30 LA	Zinc Ricinoleate	Odour Absorber
SURFAC® SXS40	Sodium Xylene Sulphonate	Hydrotrope

### Method of Manufacture

- To a beaker, add DI Water followed by PROTECTOL® BN with stirring.
- Once the PROTECTOL® BN has dissolved add SURFAC® GLDA, SURFAC® BH40 LF, ECOREMOVER®, NEODOL 91-6, SURFASORB 30 LA and SURFAC® SXS40 in order, with stirring between each addition until each raw material is fully incorporated.
- Adjust the pH to between 5.5 and 6.5 if necessary.

### Kitchen Cleaner

INGREDIENT	DESCRIPTION	Function
Water	Aqua	Diluent
Protectol BN	Bronopol	Preservative
Surquest CMI	Sodium Carboxymethyl Inulin	Descaler
Steol CS270	SLES 70%	Surfactant
Ecoremover	Blend	Surfactant
Neodol 91-6	C9-11 Alcohol Ethoxylate	Surfactant
Surfasorb 30 LA	Zinc Ricinoleate	Odour Absorbtion
Citric Acid 20% Solution	Citric Acid	pH Adjust

### Method of Manufacture

- All ingredients in order ensuring each is fully mixed before next addition
- Adjust pH to 5-7 If necessary.

## Example Home Care Formulations

### Urine Neutraliser

INGREDIENT	DESCRIPTION	Function
DI WATER	Aqua	Diluent
PROTECTOL® BN	Bronopol	Preservative
ETHANOL	Ethanol	Biocide
SURFAC® GLDA	Glutamate Diacetate NA4	Chelating Agent
SURFAC® L30	Sodium Lauroyl Sarcosinate	Surfactant
SURFASORB 30 LA	Zinc Ricinoleate	Odour Absorber
CITRIC ACID 20% SOLUTION	Citric Acid	pH Adjust

### Method of Manufacture

- To a beaker, add DI WATER, followed by PROTECTOL BN, with stirring until dissolved.
- Add ETHANOL, SURFAC® GLDA, SURFAC® L30 and SURFASORB 30 LA with stirring between each addition, ensuring full incorporation.
- Adjust pH using CITRIC ACID 20% SOLUTION to around pH 5.5(5.25-5.75)

### Oven Cleaner

INGREDIENT	DESCRIPTION	FUNCTION
DI Water	Aqua	Diluent
SURFAC® GLDA	Tetrasodium Glutamate Diacetate	Solvent
SURFAC® SXS 40	Sodium xylene sulphonate	Solubiliser
SURFAC® AQ	Blend of plant surfactants	Surfactant
SURFAsorb® 50WB	Zinc Ricinoleate	Odour Absorbtion
SURFAC® MELA	Monoethanolamine	pH Adjust
SURFAC® UN65 95	C9-11 Alcohol Ethoxylate	Surfactant

### Method of Manufacture

- To a beaker, add DI WATER, followed by SURFAC® GLDA, SURFAC® SXS 40,SURFAC® AQ, SURFASORB 50WB and SURFAC® UN65 95 in order, allowing full incorporation with stirring before the next raw material is added.
- Add the required amount of SURFAC® MELA to ensure pH lies between 11.1 and 11.4

## Example Personal Care Formulations

### Deodorant Stick

Ingredient		Description	Function
SURFAC® MCTG	A	Caprylic/capric Triglyceride	Emollient
SURFAC® CANDELILLA	A	Candelilla Wax	Wax
MANGO BUTTER	A	Mangifera Indica Seed Butter	Moisturising
SURFACARE® VITAMIN E ACETATE	A	Tocopheryl Acetate	Antioxidant
SURFAC® CS	A	Cetearyl Alcohol	Thickenr
CITROFOL® AI EXTRA	A	Triethyl Citrate	Deodoriser
SUNFLOWER OIL	A	Helianthus Annuus Seed Oil	Moisturising
SHEA BUTTER	A	Butyrospermum Parkii Butter	Moisturising
TAPIOCA STARCH	B	Tapioca Starch	Absorption
SURFASORB 30 LA	C	Zinc Ricinoleate	Odour Absorption
GIVAUDAN HAPPY PUPPY	C	Parfum	Fragrance

### Method of Manufacture

- To a beaker, add Deionised Water followed by Carbopol® Clear.
- Allow this to fully hydrate for 5 minutes before placing on overhead stirrer on low shear (400rpm, 2 minutes).
- Once incorporated, add Surfasc® G995V, followed by a premix of Surfascare® PGHC and Surfascorb 30LA with stirring between additions.
- Once combined, add Aloe Vera 1:1 and Verstatil® PE and stir for 15 seconds until fully incorporated.
- Add Tego® Pearl N300 with stirring until product appears pearlised.
- Add Sodium Hydroxide (20%) solution until gel begins to thicken and pH lies around 5.5-6.

### Sweat Shield Lotion

Ingredient		Description	Function
DEIONISED WATER	W	Water	Solvent
SURFAC® G995V	W	Glycerin	Humectant
XANTHAN GUM FEDCS-PC	W	Xanthan Gum	Rheology Modifier
ERYLITE® F8030F	W	Erythritol	Moisturising
SURFAWAX BP	O	Beeswax, White Beeswax	Emulsifier
SURFAC® GMS SE 40 MB	O	Glyceryl Monostearate	Emulsifier
SUNFLOWER OIL	O	Sunflower Oil	Emollient
SURFAC® MCTG	O	Capryl/Capric Triglyceride	Emollient
SURFAC® CS	O	Ceto-Stearyl Alcohol	Stabiliser
SURFASORB 30 LA	A	Zinc Ricinoleate	Odour Neutraliser
SODIUM HYLURONATE	A	Hyaluronic Acid	Active
GIVAUDAN FRESH MINT	A	Parfum	Fragrance
VERSTATIL® TBO	A	Triethyl Citrate; Caprylyl Glycol; Benzoic Acid	Preservative

### Method of Manufacture

- To a beaker, add deionised water; followed by a premix of Surfasc® G995V and Xanthan Gum, mix in a small beaker for 15 seconds until fully incorporated.
- Stir this into the main beaker with high shear until fully incorporated(2-3 minutes).
- To this add the Erylite® F8030F and Stir until completely dissolved and place this on the hot plate to heat up.
- In a separate beaker, add all Oil Soluble materials and begin to heat, Surfawax BP, Surfasc® GMS SE 40 MB, Sunflower Oil, Surfasc® MCTG, and Surfasc® CS.
- Once both beakers have reached around 70C or the Oil phase is fully dissolved (this should take around 10 minutes), add Beaker B --> A and homogenise for 1 minute 20 seconds (based on 100g batch).
- Allow to cool to 40C before adding the Surfascorb 30 LA, Fragrance and Verstatil® TBO, in order with stirring between each addition until product is fully homogenous.

## Example Personal Care Formulations

### Sweat Shield Recovery Cream

Ingredient		Description	Function
DEIONISED WATER	W	Water	Solvent
SURFAC® G995V	W	Glycerin	Humectant
XANTHAN GUM FEDCS-PC	W	Xanthan Gum	Rheology Modifier
ERYLITE® F8030F	W	Erythritol	Moisturising
SURFAWAX BP	O	Beeswax, White Beeswax	Emulsifier
SURFAC® GMS SE 40 MB	O	Glyceryl Monostearate	Emulsifier
SUNFLOWER OIL	O	Sunflower Oil	Emollient
SURFAC® MCTG	O	Capryl/Capric Triglyceride	Emollint
SURFAC® CS	O	Ceto-Stearyl Alcohol	Stabiliser
SURFASORB 30 LA	A	Zinc Ricinoleate	Odour Neutraliser
SODIUM HYLAURONATE	A	Hyaluronic Acid	Active
GIVAUDAN FRESH MINT	A	Parfum	Fragrance
VERSTATIL® TBO	A	Triethyl Citrate; Caprylyl Glycol; Benzoic Acid	Preservative

### Method of Manufacture

- To a beaker, add deionised water; followed by a premix of Surfachem® G995V and Xanthan Gum, mix in a small beaker for 15 seconds until fully incorporated.
- Stir this into the main beaker with high shear until fully incorporated (2-3 minutes).
- To this add the Erylite® F8030F and Stir until completely dissolved and place this on the hot plate to heat up.
- In a separate beaker, add all Oil Soluble materials and begin to heat, Surfawax BP, Surfachem® GMS SE 40 MB, Sunflower Oil, Surfachem® MCTG, and Surfachem® CS.
- Once both beakers have reached around 70C or the Oil phase is fully dissolved (this should take around 10 minutes), add Beaker B --> A and homogenise for 1 minute 20 seconds (based on 100g batch).
- Allow to cool to 40C before adding the Surfisorb 30 LA, Fragrance and Verstatil® TBO, in order with stirring between each addition until product is fully homogenous.

### Fresh Wipe Liquid

Ingredient	Description	Function
DEIONISED WATER	Water	Solvent
SURFAC® G995V	Glycerin	Humectant
XANTHAN GUM FFCS-PC	Xanthan Gum	Rheology Modifier
SURFACARE® L30	Sodium Lauroyl Sarcosinate	Surfactant
SURFASORB 30 LA	Zinc Ricinoleate	Odour Absorption
SURFAC® B4	Cocamidopropyl Betaine	Surfactant
ALOE VERA GEL 1:1	Aloe Barbadensis Leaf Juice	Cooling
GIVAUDAN EXOTIC VANILLA AND TONKA	Parfum	Fragrance
SURFACARE® T20	Polysorbate-20	Solubiliser
VERSTATIL® TBG	Triethyl Citrate; Glyceryl Caprylate; Benzoic Acid	Preservative

### Method of Manufacture

- To a beaker, add Deionised water. Premix Surfachem® G995V and Xanthan gum stirring for 15 seconds until fully incorporated and add to the main beaker with stirring until full homogeneity is achieved.
- Add Surfachem® B4 and Surfachem® L30 together and stir until fully incorporated into the main beaker (this should take 15 seconds approx).
- Add Aloe Vera Gel 1:1 and stir until homogenous, followed by Surfisorb® 30 LA continually stirring.
- Finally, solubilise the Givaudan Exotic Vanilla and Tonka in Surfachem® T20 and add to the main batch with slow hand stirring (10 seconds). Final product should appear as a clear liquid with low viscosity (300-500cP, T-SP2 10rpm).

## Example Personal Care Formulations

### DeoGelo Pearlsed

Ingredient	Description	Function
DEIONISED WATER	Water	Solvent
LUBRIZOL CARBOPOL® CLEAR	Carbomer	Rheology Modifier
SURFAC® G995V	Glycerin	Humectant
SURFASORB 30 LA	Zinc Ricinoleate	Odour Absorption
ALOE VERA 1:1 GEL	Aloe Barbadensis Leaf Juice	Soothing
TEGO® PEARL N300	Glycol Distearate (and) Laureth-4 (and) Cocamidopropyl Betaine	Pearlescence
VERSTATIL® PE	Phenoxyethanol in ethylhexylglycerin	Preservative

### Method of Manufacture

- To a beaker, add Deionised Water followed by Carbopol® Clear.
- Allow this to fully hydrate for 5 minutes before placing on overhead stirrer on low shear (400rpm, 2 minutes).
- Once incorporated, add Surfac® G995V, followed by a premix of Surficare® PGHC and Surfisorb 30LA with stirring between additions.
- Once combined, add Aloe Vera 1:1 and Verstatil® PE and stir for 15 seconds until fully incorporated.
- Add Tego® Pearl N300 with stirring until product appears pearlsed.
- Add Sodium Hydroxide (20%) solution until gel begins to thicken and pH lies around 5.5-6.

# Surfachem

To learn more and start using these ingredients, get in touch with your Surfachem contact or send us an email at [info@surfachem.pl](mailto:info@surfachem.pl)



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