We're not making just another pretty face.

We're improving lives.

NON-TOXICITY

POSS have been demonstrated to be non-toxic, and cytocompatible. In the EU, several POSS Molecular Silicas® are are R22 rated "not harmful if swallowed." POSS has been used in dentistry and food packaging for over ten years.

NEW OPPORTUNITIES

POSS provides a means to create synergies between key ingredients to simplify formulations and create new performance effects.

WOUND HEALING

Several POSS compounds actively fight microorganisms and have shown excellent wound closure, low migration and strong adhesion to skin and hair.

TISSUE REGENERATION

Tissue scaffolds containing POSS support cell binding, viability and proliferation, potentially eliminating the need for less compatible materials commonly used to augment or replace artificial human tissue. POSS currently forms a key component in synthetic tear ducts, blood vessels, ears, heart valves, noses and tracheas.

POSS®

Nanostructured® Chemical Technology

POSS chemicals are derived from polyhedral oligomeric silsesquioxanes and polyhedral oligomeric silicates. POSS have unique features:

(1) The chemical composition is intermediate between that of silicas and silicones yet are organic compatible.
(2) POSS are chemically precise and enable predictable property control.
(3) POSS cages are rigid, physically large, and range approximately from 1-5 nm in size.
(4) The unique cage size provides unparalleled rheology and topological effects.

Unlike silica, silicones or fillers, POSS are organic compatible and can contain one or more covalently bonded reactive functionalities suitable for polymerization, grafting, surface bonding, coupling and dispersion. At the coating level, POSS increases the carrying capacity of formulations, thereby improving the shelf-stability and active delivery of key ingredients.

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THE CREATORS OF POSS®

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POSS®

Leading the way to the next generation of premium cosmetics and skin care

hybrid
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POSS® and Personal Care

A beautiful partnership

- Safe
- Excellent transfer resistance
- Exceptional water resistance
- Compatibilization of ingredients
- Dazzling high gloss
- Smooth, supple textures
- Outstanding UV stability
- Polymerizable
- Lubricating
- Non-interacting

The use of POSS in personal care formulations is a new and safe way to achieve hydration, transfer resistance, durability and supple textures, without the inconvenience of formulation complexity.

Hybrid specializes in co-innovation with clients, and exclusivity of supply. Strict confidentiality is maintained through bilateral nondisclosure and supply agreements.

Please contact us to discuss your needs and interests at info@hybridplastics.com.

Our goal is to set new industrial performance and manufacturing standards through innovation and collaboration with customers.

PRODUCT	FEATURES	BENEFITS	APPLICATIONS	STATUS
PG1190	Clear, colorless liquid. Water and alcohol soluble.	Hydrating, baby soft feel on skin and hair. Compatibilizer and rheological diluent. Noncytotoxic	Lubrication and carrier for ingredients in lotions, gels, and coatings.	TSCA INCI REACH pending
MA0735	Clear, colorless. Alcohol and water emulsification.	Compatibilizer, rheological diluent, carrier and crosslinker.	Compatibilizer, rheological diluent and carrier.	TSCA INCI REACH pending
EP0409	Clear, colorless. Alcohol and water emulsification.	Compatibilizer, rheological diluent, carrier and crosslinker.	Compatibilizer, rheological diluent and carrier.	TSCA INCI REACH pending
MS0805	Clear, colorless. Alcohol, silicone and oil compatible.	Rheological diluent and lubricious hydrophobe. Low migration skin adhesion, hemostatic & antimicrobial. High gloss.	Lubrication and plasticizer in lotions gels, coatings.	TSCA INCI REACH pending
SO1455	Clear, colorless. Alcohol emulsification. Oil compatible.	Rheological diluent lubricious hydrophobe. Nonmigrating. Skin adhesion, hemostatic and antimicrobial. High gloss.	Lubrication and plasticization carrier for ingredients in lotions gels, coatings.	TSCA INCI REACH pending
MS0825	White solid, organic soluble similar to PTFE. Aliphatics soluble.	Increases porosity of coatings and 50% less dense than PTFE. Smooth, silky feel.	PTFE-like lubricious effect without use of fluorinated chemicals in lotions and gels.	TSCA R22 INCI REACH pending
AM0281	Clear semi-solid, organic-soluble.	Outstanding adhesion to keratin and collagen. Carrier for actives.	Durable coatings and lotions and gels.	TSCA INCI REACH pending