

Sulfur-Free Plasteline Clay

Chavant™ NSP™ clay is a meltable, versatile non-drying modeling clay offering the following advantages:

- Low-Tack Feel
- Holds Ultra-Fine Detail
- Sulfur-Free

- Solvent Friendly
- Sculpting Tool FriendlySilicone Friendly
- Can Be Liquefied
- Great for Casting

TECHNICAL OVERVIEW

PRODUCT OVERVIEW

NSP™ professional grade sculpting clays are famous for their unique characteristics, good adhesive qualities, flexibility, & length. Since its introduction in 1993, the NSP™ Series has become an industry standard in Special Effects & Fine Art studios around the world.

NSP™ clays have less elongation making them ideal for cutting crisp lines (without ragged edges) and capturing ultrafine detail. The high wax percentage of this versatile clay series offers benefits which include outstanding sculpting precision & increased resistance to accidental deformation.

GENERAL PROCESSING RECOMMENDATIONS

WORKING WITH THE CLAY

An armature may be needed to support figurative work or thin section parts made in NSP™. Traditional wood, metal, & silicone clay tools are recommended for working with the clay. Heated tools (such as a wax pen) or tools exposed to a heat source can be used with **NSP™** Hard. The tackiness of NSP increases when softened with heat. Repeated heating and cooling will accelerate oxidization, which can result in firmer clay surfaces.

SMOOTHING THE CLAY SURFACE

NSP™ clay scrapers and rake tools are often used to initially make the clay surface uniform. **NSP™** is very solvent friendly; solvents such as naphtha, clear mineral spirits and turpentine are aggressive solvents which can be used to quickly soften and dissolve the surface. Citrus based solvents such as D-limonene can also be used but may cause inhibition when molding the clay using silicone rubber. 99% Isopropyl alcohol can be used to smooth the clay surface if a less aggressive solvent effect is desired. **NOTE:** If isopropyl myristate is used on the surface of **NSP™**, the surface will remain soft, and it will not return to the original hardness.

CLEAN UP

NSP™can be cleaned from tools and surfaces with Naptha or 99% Isopropyl alcohol. Clay can bond to fabrics and stain clothing.

TECHNICAL OVERVIEW		
Colors:		
Green	Brown	Tan
Durometer / Hardnesses:	Soft Medium Hard	24A 33A 51A
Tack Level:		Low Tack
Wax Content:		Medium
Density:	Soft Medium Hard	99 lbs/cu.ft. 99 lbs/cu.ft. 99 lbs/cu.ft.
Specific Gravity:	Soft Medium Hard	1.58 g/cc 1.58 g/cc 1.58 g/cc
Softening Temp:	Soft Medium Hard	120°F/49°C 125°F/52°C 130°F/54°C
Trowelable Temps	Soft Medium Hard	175°F/80°C 175°F/80°C 175°F/80°C
Brushable Temp:	Soft Medium Hard	185°F/85°C 185°F/85°C 185°F/85°C
Liquefy Temp:	Soft Medium Hard	205°F/97°C 205°F/97°C 205°F/97°C
Max Temp:		220°F/104°C
Packaging:	2lb. bars (.907 kg.)	



GENERAL PROCESSING RECOMMENDATIONS CONTINUED

MAKING A SLIP OR SLURRY

Solvents such as naphtha, clear mineral spirits and turpentine can be used to dissolve the clay to a workable slip or slurry. This liquid solution can then be used to create texture effects, join clay together, and coat clay surfaces.

SOFTENING BRUSHING TROWELING LIQUEFYING

Heating Equipment Options

- Temperature Controlled Crock Pot®
- Scientific/Laboratory Oven
- Hot Box With Conventional Temperature Monitor
- Warming Oven Dedicated For Clay Only (Do Not Use Home Oven)
- Microwaves Are **NOT** Recommended Due To Uneven Heating And Potential Burning.

SOFTENING THE CLAY

NSP[™] is most often warmed to a temperature (**Soft** = 120° F/49°C; **Medium** = 125° F/52°C; **Hard** = 130° F/54°C) to soften it. When it returns to room temperature it also returns to the initial firmness.

TROWELING THE CLAY

NSPTM can also be heated to a state soft enough to be spread across a surface. (**Soft** = 175° F/80°C, **Medium** = 175° F/80°C; **Hard** = 175° F/80°C) As these temperatures are very hot and can cause burns, a metal trowel (or similar spreader) is needed to apply the hot clay safely. When troweling, the clay can be spread easily across a vertical armature surface with minimal to no slumping in a $\frac{1}{4}$ inch (1.27 cm) thickness.

BRUSHING THE CLAY

NSPTM at (**Soft** = 185°F/80°C; **Medium** = 185°F/80°C; **Hard** = 185°F/80°C) is considered the brushing temperature of the clay. This temperature produces a lower viscosity (more flowing) clay, suitable for initial coating on armatures or other surfaces that can be applied with a brush. A small scale test against surfaces to check for suitability is always recommended.

LIQUEFYING THE CLAY

NSP™ can be liquefied and poured (**Soft** = 205°F/97°C; **Medium** = 205°F/97°C; **Hard** = 205°F/97°C). This method is utilized to make exact reproductions (called castings) of a form by pouring the liquefied clay into a mold. Castings then can be further shaped and revised. Clay might experience separation of the base materials during the heating process. Periodically mixing the liquid clay during the process and before pouring will ensure uniformity of the clay. It is recommended that the mold be heated to 150°F/66°C prior to pouring liquefied clay into mold for best surface detail.

SHELF LIFE

Unopened: stored at room temperature away from sunlight or sources of UV, **NSP™** will have a shelf life of 2 years. See chavant.com for details.

Opened: over time, clay exposed to air will oxidize and the surface may eventually dry out. Once opened, place clay in airtight container or wrap completely in plastic wrap and store away from sunlight or sources of UV.

SAFETY FIRST

Keep Out Of Reach Of Children

Avoid overheating the clay, results in serious burns to the skin.

The Safety Data Sheet (SDS) for this or any Chavant product should be read prior to use and is available upon request from Smooth-On. All Smooth-On products are safe to use if directions are read and followed carefully.

Important: The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.