



PRESERVE YOUR ASSETS WITH **SAP-SEAL®** CAPS





## **SAP-SEAL®**

### **Corrosion Prevention Products**

**SAP-SEAL PRODUCTS, INC.** is a service-oriented company specializing in unique products that prevent and stop corrosion. We have been in business for over 25 yrs and enjoy excellent relationships with all of our customers around the world.

### **WHAT ARE OUR PRODUCTS?**

We currently offer two different styles of caps that will permanently prevent corrosion on any industrial nuts and bolts.

#### **SAP-SEAL® SCREW-ONS & SAP-SEAL® CAPS**

These caps are also commonly referred to as bolt or nut caps, bolt cover caps, flange protection caps, screw-on caps and bolt/thread protectors. The design is a patented plastic cap, pre-filled (optional) with a rust inhibitor that is effortlessly applied to nuts and bolts to protect them from corrosion. **SAP-SEAL®** caps are made of polyethylene high-density plastic enabling the caps to withstand temperature fluctuations from -40°F up to a scorching 200°F. They provide the best line of defense against corrosion anywhere you use a nut and bolt. Underwater (fresh and salt), above ground and underground. The caps stay in place for many years.

This longevity is very cost effective. While protecting against rust and corrosion, it also protects against accidental thread damage when performing any kind of maintenance. Our caps also allow the end user to forgo the purchase of stainless steel or galvanized nuts and bolts, which cost significantly more than these caps.

The caps are available in 18 different sizes starting at 1/2" all the way up to 3 3/4". Additional sizes, larger or smaller, can be custom made upon request.

**SAP-SEAL®** caps can also be made available in a variety of colors. This option can serve as a safety marker, bolt identification or simply improve the bolt appearance.

## **SAP-SEAL® PRODUCT APPLICATIONS**

The three most popular ways users protect nuts and bolts from corrosion are as follows:

- The use over average nuts and bolts
- The use of coated nuts and bolts
- The use of stainless steel nuts and bolts

Users can choose to purchase nuts and bolts that are coated with corrosion preventing properties during the manufacturing process. Because the corrosion preventing coating is applied to the nut and bolt at the factory, the coating is subjected to harmful wear and tear during the handling, transportation and assembly process. The protective coating on a majority of these nuts and bolts becomes compromised the moment they leave the factory. This ultimately requires time-consuming and costly re-coating at the job site.

Unfortunately, in most cases, job site repairs to re-coat damaged nuts and bolts are rarely performed resulting in the use of unprotected nuts and bolts. The degradation of the corrosion prevention properties has now doomed the long-term performance of the asset. Because of this "once unnoticed problem", more and more users are adapting the screw-on cap method to protect against corrosion. *It's simple. It's economical and it's proven...* and it's easy to see which nuts and bolts are not protected... they are the ones without the caps!

The use of stainless steel nuts and bolts to protect against corrosion is certainly an option. However, expensive stainless steel is not offered in all sizes and can be 4 to 6 times the price of standard steel nuts and bolts. If an end user is simply using stainless steel nuts and bolts to prevent corrosion, then it is fiscally responsible for them to evaluate the corrosion prevention capabilities of screw-on caps.



## **WHERE ARE SAP-SEAL® CAPS MOST WIDELY USED?**

### **Manufacturers (OEMs)**

- Wind Turbines, Oil Rigs
- Pipeline Flanges - Gas, Oil, Water, Sewage, Other
- Refineries & Manufacturing Plants
- Bridge Expansion Joints & Cable Stay areas
- Grinders
- Outdoor Advertising Signs & Light Posts

### **Bridge Engineers**

- Builders, Consultants, DOTs

### **Distributors**

- Manufacture Representatives
- Fastener Companies
- Corrosion Prevention Specialists
- Construction Contractors

### **Corrosion Specialists**

- Utility Company Employees
- Consultants
- DOT Employees
- Maintenance Companies
- U.S. Navy, U.S. Coast Guard, & U.S. Corp. of Engineers



# SAP-SEAL®

## Screw-on Cap List of Sizes

DIM.	H		H1		H2		D		F	
INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH
1/2"	46	1.81	17	0.70	22	0.86	27	1.07	2	0.07
5/8"	44	1.73	16	0.63	22	0.87	28	1.01	2	0.08
5/8"H	61	2.04	26	1.00	28	1.01	33	1.03	2	0.08
3/4"	55	2.17	20	0.08	32	1.26	34	1.34	2	0.08
3/4"H	64	2.52	28	1.01	28	1.11	39	1.54	2	0.08
7/8"	76	3.00	23	0.91	41	1.61	41	1.61	2	0.08
1"	90	3.54	28	1.01	46	1.81	48	1.09	3	0.12
1-1/8"	84	3.31	30	1.18	40	1.57	53	2.01	3	0.12
1-1/4"	112	4.41	36	1.42	61	2.04	58	2.28	3	0.12
1-3/8"	95	3.74	36	1.42	47	1.85	63	2.48	3	0.12
1-1/2"	114	4.49	40	1.57	59	2.32	67	2.64	3	0.12
1-5/8"	119	4.69	43	1.69	58	2.28	73	2.87	3	0.12
1-3/4"	129	5.08	45	1.77	67	2.64	79	3.11	3	0.12
1-7/8"	135	4.92	50	1.97	70	2.76	84	3.31	3	0.12
2"	135	4.92	52	2.05	65	2.56	88	3.46	4	0.16
2-1/4"	153	6.02	61	2.04	78	3.07	100	3.94	4	0.16
2-1/2"	165	6.05	65	2.56	79	3.11	110	4.33	4	0.16
2-3/4"	195	7.68	73	2.87	98	3.86	124	4.88	5	0.02
3"	200	7.87	80	3.15	101	3.98	130	5.12	5	0.02
3-1/4"	210	8.22	90	3.54	103	4.06	149	5.87	4	0.16
3-1/2"	225	8.86	93	3.66	110	4.33	155	6.01	5	0.02
3-3/4"	220	8.66	100	3.94	98	3.86	171	6.73	5	0.02

## Snap-on Cap List of Sizes

M-8	1/4"	M-27	1"	M-48	1 7/8"
M-10	3/8"	M-30	1 1/8"	M-52	2"
M-14	1/2"	M-33	1 1/4"	M-60	2 1/4"
M-18	5/8"	M-36	1 3/8"	M-68	2 1/2"
M-22	3/4"	M-36	1 3/8"	M-76	2 3/4"
M-24	7/8"	M-42	1 5/8"	M-85	3"
		M-45	1 3/4"		

## Material Requirements:

Item	Limit	Unit	Method
Melt index	7.0 - 9.0	G/10 Min	ASTM D1238
Density	0.9600 - 0.9640	G/CC	ASTM D792A 1

(Larger and smaller sizes can be made available)

**FOR ORDERING INFORMATION VISIT**  
**[www.sapseal.com](http://www.sapseal.com)**

### Material Composition

Polyethylene high density 08064N  
A narrow molecular weight distribution homopolymer.

### Government/Industrial Standards

Food Contact, 177.1520 (C) 2.2 USDA Acceptable  
This is a copy of The Dow Chemical Company's  
sales specification dated July 31, 1990  
effective August 1988, supersedes January 14, 1986

Alvania Grease EP(LF) is a multipurpose, industrial strength grease made from a blend of high-viscosity index mineral oils and lithium hydroxystreate soap thickener. Shell Alvania Grease EP(LF) holds up to extreme pressures, temperatures ranging from -20°C to 120°C, and is highly resistant to water wash-out.

(Additional information is available upon request)