

ENVIRONMENTALLY FRIENDLY **TUBULAR MAINTENANCE**

OIL CENTER RESEARCH INTERNATIONAL, L.L.C.



Corrosion is the result of a combination of air and water subjected to metal surfaces. The exposure to high humidity, salt water, brine solutions, chlorides, and bromides accelerate the effect of corrosion to tubular goods during storage and over time reduce the thickness of the wall of the pipe.

The Protekto-Coat™ line of products prevents and removes the corrosive chemicals. The products are manufactured specifically for the maintenance

of oilfield tubular goods; however, they do have a broad range of use extending to all areas where rust or corrosion is a problem.

Protekto-Coat™'s Environmentally Friendly products include water-bases coatings, biodegradable corrosion inhibitors, cleaners and degreasers, and metal free storage compounds designed to offer protection to metal surfaces along with the environment.

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Oil Center Research International, L.L.C.
is a team committed to quality service
and products in an ecologically balanced
global marketplace.

BUL. NO. 37-I

CASING, LINE PIPE & TUBINGS

1114 Clear, Low VOC, Fast Dry, and Water-based External Coating is a clear, organic synthetic-based pipe coating formulated to provide excellent rust protection to external tubular surfaces. It is a fast dry coating that provides low VOC emissions and exhibits good adhesion to steel surfaces. Applications: tubing, casing, line pipe, drill pipe, pipe racks, steel tanks, structural and drilling rigs.

1123 Amber External is a HAPS-free, tinted, waterbase coating that can offer an excellent long term protective coating while tubular goods are in storage. It is fast drying, offers low VOC emissions, and exhibits good adhesion to steel surfaces.

710 Biodegradable Internal Coating is a petroleum hydrocarbon-free internal pipe coating formulated to protect the ID of tubular from the harmful effects of corrosion during storage. 710 will not dry out, crack, gum-up, or reduce the internal diameter of the pipe.

799 Environmentally Acceptable Internal Coating protects the ID of tubular. It will not dry out, crack, or reduce the internal diameter of the pipe.

CLEANERS & DEGREASERS

9175 Dope Gone removes oil-based muds, and aids in the effective removal of heavy soils, mildew stains, and industrial oils and greases. When mixed with water it can be used for cleaning bilge operations, drilling equipment, and rig platforms.

9649 Power Solve, made with D. Lemonine, is a concentrated, multi-purpose degreaser that dilutes with water and remains clear. It degreases concrete floors, trucks, and equipment and cleans oil deposits from metal surfaces while acting as a deodorizer as well.

DIP TANK/SUCKER ROD COATINGS

938 Flexible Internal/External Coating is a self-healing coating for use on drill collars and drill pipe as well as sucker rods. It cures to a medium-hard waxy film that guards against rust and corrosion during transit and for short to medium-term storage.

1114D HAPS-Free, Clear, Water-Based Dip Coating provides excellent rust protection to external tubular surfaces. It provides a high gloss finished coating with long lasting protection against corrosion without flash rusting.

1132D HAPS-Free, Black, Water-Based Dip Tank Coating is formulated to provide excellent rust protection to external tubular surfaces. It provides a durable film that resists cracking, peeling, or scaling off under varying conditions.

DRILL COLLAR & TOOL JOINTS

1122 Black, Low VOC, Fast Dry, Water-Based External Coating has no flash point. It is an organic synthetic-based pipe coating formulated to provide excellent rust protection to external tubular surfaces. 1122 provides a high gloss finished coating to steel surfaces.

1123 Amber, Low VOC, Fast Dry, Water-Based External Coating is an organic synthetic-based pipe coating that provides excellent rust protection to external tubular surfaces. 1123 provides low VOC emissions and exhibits good adhesion to steel surfaces.

710 Biodegradable Internal Coating is a petroleum hydrocarbon-free internal pipe coating formulated to protect the ID of tubular from the harmful effects of corrosion during storage. 710 will not dry out, crack, gum-up, or reduce the internal diameter of the pipe. This fast drying coating provides low VOC emissions.

799 Environmentally Acceptable Internal Coating protects the ID of tubular. It will not dry out, crack, or reduce the internal diameter of the pipe.

SALT NEUTRALIZERS

690 is an economical, water-soluble, corrosion inhibitor for tubular goods exposed to salt water and other brine salts. Designed for use immediately after the pipe is placed on the rack coming out of the hole.

690C inhibits the corrosive effects of various salts in aqueous solutions when exposed to ferrous metal surfaces. Aqua Cure Concentrate is non-polluting, non-toxic, and non-flammable.

691 is a non-toxic, non-polluting, non-flammable corrosion inhibitor designed to be used on 13 Chrome to prevent pitting. 691 contains twice the amount of corrosion inhibitors as 690 or 690C.

STORAGE COMPOUNDS

127 is designed for threaded connections for use in mills and forms a protective film on metal surfaces, which inhibits oxidation and retards rust formation. Displaces moisture, non-toxic, and environmentally safe. Orange in color.

127AG is designed to provide corrosion protection to pipe threads during periods of extended storage in arctic environments. The water resistant properties help prevent water and moisture intrusion, greatly reducing the risk of rust formation under the thread protector.

128 is designed to protect tubular goods threaded connections during storage. May be used as a general purpose lubricant where water resistant, corrosion inhibited grease/lubricant is recommended. Green in color.

RIG WASH

573 is a biodegradable, heavy-duty, white cleaning compound available in powder form. It reduces the risk of serious accidents associated with an unclean work environment. 573 will remove dirt, grease, and oil from rig equipment and fixtures. It is also used as an excellent laundry detergent for hand washing heavily soiled clothes.

RUST REMOVERS & PRIMERS

905 Rust End seals off oxidation; converting rust into a hard, high quality metal primer. It acts as a bonding agent for epoxy, enamel, acrylic, and oil-based finishes with exceptional bonding of moisture cured polyurethanes. 905 is biodegradable, non-toxic, and non-flammable.



EXTERNAL PIPE COATING COVERAGE* GUIDE

FOR TUBING, CASING AND DRILL PIPE**

PIPE SIZE (ins.)	COVERAGE: JOINTS/GAL
3/4	12.0
1	9.7
1 1/4	7.7
1 1/2	6.6
2 1/16	6.1
2 3/8	5.1
2 7/8	4.2
3 1/2	3.3
4	2.9
4 1/2	2.4
5	2.1
5 1/2	1.8
6	1.6
6 3/4	1.4
7	1.2
7 3/8	1.1
8 3/8	1.0
9 3/8	0.9
10 3/4	0.8
11 3/4	0.7
13 3/8	0.6
16	0.5
20	0.4

* COVERAGE refers to joints per gallon.

** INTERNAL PIPE COATINGS will cover approximately twice (2 times) as many joints as shown above.

NOTE: These coverage estimates in this chart are based upon application at recommended rates and may vary depending upon the application method and the spray equipment.

PIPE SIZE (ins.)	COVERAGE: JOINTS/GAL
25	0.3
30	0.21
35	0.19
40	0.08
45	0.05
50	0.03

NOTE: The coverages in this chart for large size pipes are estimated amounts.

PIPE STORAGE COMPOUND APPLICATION GUIDE

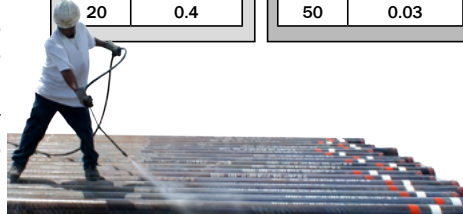
THREADED & COUPLED TUBING

Nom. Size (ins.)	Jts./#	#/100' Range 2
3/4	57.6	0.578
1	45.9	0.726
1 1/4	36.4	0.915
1 1/2	31.8	1.047
2 1/16	28.6	1.166
2 3/8	25.3	1.316
2 7/8	20.9	1.596
3 1/2	17.2	1.940
4	15.2	2.184
4 1/2	12.1	2.744

Range 2 = 28' - 32'

Nom. Size (ins.)	Jts./#	#/1000' Range 2	#/1000' Range 3
4 1/2	12.1	2.793	2.422
5	11.8	2.864	2.483
5 1/2	11.1	3.054	2.649
6	10.4	3.272	2.838
6 3/8	9.5	3.579	3.104
7	8.9	3.818	3.311
7 3/8	8.0	4.242	3.678
8 3/8	7.1	4.772	4.139
9 3/8	6.4	5.327	4.620
10 3/4	5.8	5.873	5.094
11 3/4	5.3	6.363	5.518
13 3/8	4.7	7.158	6.208
16	3.7	9.162	7.946
20	2.8	12.055	10.455

Range 2 = 25' - 34'
Range 3 = 34' OR MORE



This chart is calculated on the basis of one doping per joint under laboratory conditions. Actual field applications may naturally vary depending on the operator. Most companies use twice the amount indicated above.