

Descale Shield Nu-Well 140 Liquid Acid

Description

Descale Shield Nu-Well 140 is an NSF-certified synthetic acid with organic and metal inhibitors that is safe to transport and handle and non-damaging to steel well components. **Descale Shield** has additives for deeper penetration into the filter pack and formation and dissolves calcium carbonate scale 15% faster than traditional hydrochloric acid. **Descale Shield** is an environmentally friendly and better alternative to conventional acids commonly used in well rehabilitation and pipeline cleaning.

Application

When possible, obtain information on construction and performance history and submit water samples for laboratory analysis before application to determine if dosage modifications are warranted.

Well Rehabilitation:

1. Proposed treatment volume for Descale Shield can be calculated using measurements from the standing water column (casing) and borehole annulus.
2. Inject the calculated volume of fluid into the well at desired concentration based on the type of fouling and degree to which the well has been impacted. Allow product to work for sufficient amount of time. Mechanical surging of the solution during treatment will help to improve cleaning activity.
3. Following use, actively flush the well until pH and conductivity return to normal levels or until at least twice the volume injected is removed.
4. If necessary, disinfect the well following treatment.
5. Recommended dosage 100 gallons NW-140 per 500 gallons water.

Pipe Cleaning:

1. Product may be used at concentrations up to 100% depending on severity of fouling. Close off or disconnect section of pipe to be cleaned.
2. Drain and fill with NW-140 at desired concentration. It is recommended for effective cleaning to use at no less than 10% dilution strength. Allow product to work for at least 30 minutes or longer as necessary dependent on the ability to surge or agitate the mixture.
3. Drain and flush pipes with fresh water checking pH to ensure it returns to normal before reestablishing connections.
4. Recommended dosage: 75 to 100 gallons NW-140 per 500 gallons treatment volume dependent on severity of fouling.



Physical properties, shipping and handling

Appearance: Colorless to yellow colored liquid

Density: 9.59 lbs./gal.

pH (as shipped): 1.6

Melting/Freeze point: -24.9 °F (-31.6 °C)

Initial boiling point: 212° F (100°C) estimated

Solubility: 100% soluble in water

Use range: Use at a rate of 1 to 10% of the cleaning solution

- **Descale Shield** is a strong acid base and does not store well with strong caustic materials or oxidizers
- Respirators and goggles should be worn where possibility of mist or splash exists, use in well-ventilated area, wear protective gloves
- UN Number: 1760, Corrosive Liquid, Synthetic Acid, Class 8, Packing Group III
- Non-Regulated as a Hazardous Material by US DOT
- Additional physical and handling data are available on the product SDS
- Available in 55-gallon drums and 270-gallon totes

Nominal Well Size		Standard Dosage	
in.	mm	gal/ft	l/m
2	51	0.05	0.65
3	76	0.1	1.3
4	102	0.2	2.5
5	127	0.3	3.7
6	152	0.45	5.6
8	203	0.8	10.3
10	254	1.2	15
12	305	1.8	22.4
14	356	2.4	30
16	406	3.2	39
18	457	4	50.3
20	508	5	61.5
22	559	6	74.5
24	610	7	87.6
26	660	8.3	102.5
30	762	11	138
34	864	14.3	177
36	914	16	197.5

Dosage Guide Descale Shield

Example

Treat 12 in. well, 180 ft. TD, SWL = 40 ft.

Step 1 Static height = (180 ft. - 40 ft.) = 140 ft.

Step 2 Dosage Value = 1.8

Step 3 Volume of **Descale Shield** = 140 ft. x 1.8 gal./ft. = 252 gal.

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