



Acid Corrosion Inhibitor I-123

Use:

I-123 is a cost effective acid corrosion inhibitor for use in acidizing. It is compatible with all strengths of HCl and Mud acids and has special additives to ensure it doesn't interfere with emulsified acids.

I-123 is formulated without Propargyl Alcohol and is designed to form a protective film on metal surfaces for use in acidizing treatments and spearheads in fracturing treatments up to formation temperatures of 250 F. For higher temperatures increased dosage may be required or user could switch to I-124 or add an intensifier to the acid system.

Physical & Chemical Properties:

Parameter	Specification
Density	8.5 to 9 lb/gal
Solubility in Water	Soluble
Solubility in Diesel	Insoluble
Appearance	Dark colored liquid
Odor	Alcohol/Glycol/Aromatic
Flashpoint	185°F
Freeze point	< 20°F

Compatibility:

Compatible with most known acidizing fluids and additives used in acidizing treatments. However, a compatibility test is recommended before use

Environment:

I-123 is hazardous to the environment.

Typical Dosage:

Pumped at 0.5 to 4 gpt with acid fluids to provide effective corrosion inhibition.

Temperature Limitations:

Can be used across a wide temperature range, no lower or upper temperature limitations on performance. It has been effectively used up to BHT of 300 deg F. It is recommended to use an intensifier at BHT above 250 deg F or switch to I-124.

Packaging:

330 ga one way totes, 275 ga one way totes, 55 ga drums and bulk tank trucks

Availability:

Pleasanton, TX; Beasley, TX and Midland, TX

DoT Classification:

Regulated



8115 Loop 540, Beasley, TX 77417
 Toll Free: 1-855-FINORIC (1-855-346-6742)
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Performance Testing

15% HCl @ 150 F							
Test #	Acid	Metal	Temp (F)	Cl	Dosage (gpt)	Corrosion Rate (lbs/sqft-day)	Pitting Index
1	15% HCl	N80	150	Blank	0	0.192	5
2	15% HCl	L80	150	Blank	0	0.194	5
3	15% HCl	N80	150	I-123	2	0.0079	0
4	15% HCl	L80	150	I-123	2	0.0088	0
5	15% HCl	N80	150	I-123	4	0.0072	0
6	15% HCl	L80	150	I-123	4	0.0074	0

15% HCl @ 185 F								
Coupon	Additive	Dosage	Start weight (gm)	End weight (gm)	Loss (gm)	Loss %	Weight Loss (lbs per ft ² -24 hrs)	Inhibitor Efficiency
P110	Blank	0 gpt	41.4	26.678	14.722	35.56%	0.9525	NA
P110	I-123	2 gpt	39.059	38.243	0.82	2.10%	0.053	94%
P110	I-123	4 gpt	40.705	40.147	0.56	1.38%	0.036	96%
P110	I-123	8 gpt	39.081	38.661	0.42	1.07%	0.027	97%

20% HCl @ 175 F								
Coupon	Additive	Dosage	Start weight (gm)	End weight (gm)	Loss (gm)	Loss %	Weight Loss (lbs per ft ² -24 hrs)	Inhibitor Efficiency
L80 #1	Blank	0 gpt	41.402	23.676	17.726	43%	1.1465	
L80 #2	I-123	2 gpt	39.068	26.456	12.612	32%	0.816	29%
L80 #3	I-123	4 gpt	43.101	34.513	8.588	20%	0.555	52%
L80 #4	I-123	8 gpt	40.767	39.127	1.64	4%	0.106	91%
L80 #5	I-123	10 gpt	42.138	40.666	1.472	3%	0.095	92%

35% HCl (22 Be) @ 110 F over 6 hours								
Coupon	Additive	Dosage	Start weight (gm)	End weight (gm)	Loss (gm)	Loss %	Inhibitor Efficiency	Pitting Index
L80	Blank	0 gpt	41.402	21.767	19.635	47.43%	NA	
L80	I-123	1 gpt	41.026	40.895	0.131	0%	100%	1
L80	I-123	2 gpt	36.491	36.376	0.115	0%	100%	0



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15% HCl @ 225 F								
Coupon	Additive	Dosage	Start weight (gm)	End weight (gm)	Loss (gm)	Inhibitor Efficiency	Pitting Index	Corr Rate lbs/ sq ft per year
L80	I-123	8 gpt	36.674	36.935	0.261	99.30%	0	25.2
L80	I-123 + PA	6 + 1 gpt	39.806	38.772	0.200	97.40%	0	19.3