Technical Process Bulletin

BONDERITE C-IC SCALEGON 5 AERO ACIDIC SCALE CONDITIONER

(KNOWN AS TURCO SCALE GON #5)

Issued 12/17/2018

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INTRODUCTION:

BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5) is an acid activated yellow liquid used in the BONDERITE Jet Engine Process to condition and remove high temperature scale from jet engine parts.

FEATURES:

- Supplied in liquid form
- Free rinsing
- Mildly acidic
- Contains no EDTA
- Not temperature critical - wide, safe operating range

USE INSTRUCTIONS:

Tanks: Tanks and associated equipment should be made from acid and heat resistant materials.

Mixing: BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5) is used at concentration of 20 to 30% by volume in water. Mechanical agitation is recommended. Operate BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5) at 80º to 90ºC.

Rinsing: Rinse with clean ambient water by immersion followed by pressure spray.

SCALE REMOVAL PROCEDURE:

The following procedure is recommended for complete scale removal. (refer to individual Technical Process Bulletins for detailed operation)

Clean and remove loose scale:
BONDERITE C-AK ARR T4181L AERO (known as TURCO LIQUID ARR /T-4181L) or BONDERITE C-AK 4181GL AERO (known as TURCO 4181 GL)

- Rinse: Warm water immersion followed by a pressure spray with ambient or warm water.

Alkaline Permanganate Scale Conditioner and Remover:
BONDERITE C-AD 4338 AERO (known as TURCO 4338 ADDITIVE) or BONDERITE C-AK 4338 L AERO (TURCO 4338L)

- Rinse: Warm water immersion followed by a pressure spray with ambient or warm water.

BONDERITE C-IC SCALEGON 5 AERO ACIDIC SCALE CONDITIONER

(KNOWN AS TURCO SCALE GON #5)

Acid Scale Conditioner and Remover:
BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5)

- Rinse: Ambient water immersion followed by a pressure spray with ambient water.

Scale Removal (Optional):
Alkaline: BONDERITE C-AK ARR T4181L AERO (known as TURCO LIQUID ARR /T-4181L) or BONDERITE C-AK 4181 GL AERO (known as TURCO 4181 GL) or **Acidic:** BONDERITE C-IC 4409 AERO (Known as TURCO 4409) or BONDERITE C-IC 4409GL AERO (known as TURCO 4409 GL)

- Rinse: Ambient water immersion followed by a pressure spray with ambient water.

Post Treatment:
BONDERITE L-GP RUST BLOC AERO (known as TURCO RUST BLOC)

- Apply or Repeat Step 1 followed by and immersion rinse.

CONTROL:

Apparatus:

1. 205945 - Pipet, 250 mL
2. 205700 - Buret, 25 mL
3. 205402 - Beaker, 250 mL
4. 205853 - Cylinder, 100 mL
5. pH meter

Reagents:

205289 - Titrating Solution 89 (1.0N Sodium Hydroxide)

Procedure:

1. Obtain a sample from the tank and allow to cool to room temperature.
2. Pipet 50 mL sample into a 250 mL beaker.
3. Add 100 mL DI water.
4. Titrate the sample with TS 89 to a pH 8 using a pH meter.

Calculation:

mL of TS 89 X 1.312 = % by volume BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5)

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DISPOSAL INFORMATION:

Dispose of spent solution per local, state and regional regulations. Refer to HENKEL SURFACE TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional disposal information.

PRECAUTIONARY INFORMATION:

BONDERITE C-IC SCALEGON 5 AERO (known as TURCO SCALE GON #5) contains citric and glycolic acids. Avoid contact with eyes, skin and clothing. Do not take internally. Use with adequate (equivalent to outdoor) ventilation.

Protective clothing, such as a chemical face shield or goggles, gloves and apron made from acid resistant materials should be worn when handling and using this product. A NIOSH approved respirator equipped with a mechanical filter should be worn for mist conditions.

Store in closed containers at temperatures below 50ºC away from reactive metals.

Before using this product refer to container label and HENKEL SURFACE TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.

NOTICE:

The above information and recommendations concerning this product are based upon our laboratory tests and field use experience with this or similar products. However, since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage, or injury, direct or consequential, arising out of the use of this product.

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