



TURCO[®] NITRADD (Turco 4104)

ACIDIC ACTIVATOR FOR NITRIC ACID

DESCRIPTION:

TURCO NITRADD is a clear, colorless liquid acidic compound designed to be added to nitric acid/water solutions to enhance the descaling and pickling of stainless steels and heat resistant alloys, including titanium alloys, by immersion methods.

TURCO NITRADD has also been found to be effective in descaling or pickling cobalt, chrome, nickel and copper based alloys.

FEATURES:

TURCO NITRADD offers these features:

1. Can be added to nitric acid to meet specific requirements based upon alloy constituents
2. Supplied in liquid form
3. Readily mixes with nitric acid at recommended dilutions
4. Solutions can be "tailor-made" for specific alloys

USE INSTRUCTIONS:

Detailed recommendations covering many uses of TURCO NITRADD are described in TDB #496, "Descaling, Etching and Acid Cleaning of Heat Resistant Alloys. These solutions may also be used in conjunction with alkaline scale conditioners, such as TURCO 4316 or TURCO 4338. Refer to TDB #314 or #188 for details on the use of these products.

Tanks: Tanks and associated equipment should be fabricated from acid-resistant materials, since TURCO NITRADD contains acid fluorides. Mild steel and stainless steel have been found to be unacceptable materials.

CONTROL:

A laboratory test procedure is available upon request.

DISPOSAL INFORMATION:

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

WARNING! Contact may cause burns to skin and eyes.

TURCO NITRADD contains acid fluoride salts. Avoid contact with eyes, skin and clothing. Do not take internally. Avoid prolonged breathing of fumes. Use with adequate (equivalent to outdoor) ventilation.

Protective clothing, such as a chemical face shield or goggles and gloves, boots and apron, made from acid resistant materials should be worn when using and handling this material. A NIOSH-approved respirator should be worn when working in confined or enclosed areas or during mist conditions.

Do not use TURCO NITRADD/Nitric Acid mixtures near open flames or cutting torches, since hazardous gases may be generated when mixtures are subjected to thermal decomposition. Store in closed containers at temperatures between 0°C to 50°C.

Operating personnel should be instructed in the proper use and safety precautions necessary when handling products that contain acid fluorides.

Before using this product refer to container label and TURCO 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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