**DESCRIPTION:**

**NON-SPARKING METALLIC HARDENER** is ready to use, conductive or static disseminating, non-sparking metallic floor hardener that has been extensively used and recommended over many decades as a shake-on for concrete floor to render the surfaces conductive, spark-resistant, or static-disseminating. Many critical manufacturing areas require a concrete floor slab surfaces that is safe, conductive, spark-resistant, or static-disseminating. It is recommended for those areas needing protection against hazards of static electricity and static electricity sparking, etc.

**NON-SPARKING METALLIC HARDENER** is a ready to use, special formulation of metallic aggregate, Portland cement, conductive and workability agents. It produces concrete floor surfaces hard, durable, spark proof, conductive or static disseminating.

Typical installation include: Ammunition factories and bunkers, Print and varnish spray workshops, Red label production facilities, Explosive production and storage areas, Industrial floors requiring conductive properties, Acetylene/hydrogen plants, Plastic processing plants, Refineries, Atomic Energy plants, Combustible anesthetics plants, Granaries - flour mills, Coal storage areas, etc.

**SPECIFICATIONS:**

All special areas, as indicated on plans and specifications, shall be rendered conductive, static disseminating or non-sparking with **NON-SPARKING METALLIC HARDENER**, as manufactured by Anti-Hydro International, Inc., and installed in strict accordance with manufacturer’s specifications: Refer to our Waterproofing & Industrial Floor Details.

**INSTALLATION:**

**Spark Resistant Floors**

The concrete slab or topping is placed, screeded and floated. Immediately after floating, the dry **NON-SPARKING METALLIC HARDENER** dry-shake shall be broadcast uniformly on the surface at the rate of not less than 9 lbs. per sq. ft. When **NON-SPARKING METALLIC HARDENER** dry-shake has absorbed the surface moisture, the surface shall be mechanically floated. A second application of dry **NON-SPARKING METALLIC HARDENER** shall be broadcast on the surface uniformly at the rate of not less than 0.9 lbs. per sq. ft. and the floating operations repeated, Apply the second application at right angles to the first.

Care must be taken to make sure that no non-metallic aggregates from the concrete base work its way to the surface. The floor surface shall then be finished with not less than two (2) steel trowelings to a smooth, hard, dense finish, free from blemishes.

Control joint spacing should be as recommended in A.C.I. Standard 302-Concrete Floor and Slab Construction. Refer to A.C.I. 302 for recommended concreting practices. Refer to our Waterproofing & Industrial Floor Details.

**Static Disseminating Floors**

All static-disseminating floor slabs should be grounded. This may be accomplished by providing one ¾” x 6’ ground rod of hard copper, brass, or copper-encased steel for each 400 sq. ft. of floor area.

The ground rods shall be driven into the earth vertically. The tops of the rods will be at an elevation of not less than ½” below the top surface of the finished floor level. An approximately 2” round or square piece of copper or brass Hardware cloth, 4-mesh, 0.047” wire diameter, shall be centered on and rigidly brazed to the top of the rods.

A slight cup-shaped pocket or depression about 2” in diameter shall be formed in the concrete surrounding the tops of the rods so that the conductive metallic aggregate is in firm and full contact with the rods and the wire discs. Each ground rod shall be connected electrically to the slab reinforcement by brazing a copper or brass braided strap.

**Curing**

**CONDUCTIVE CURE** must be used for curing the floor surfaces finished with **NON-SPARKING METALLIC HARDENER** at the rate of 200 sq. ft. per gallon.

**PERFORMANCE STANDARDS & SPECIFICATION:**

**NON-SPARKING METALLIC HARDENER** meets and exceeds NAV-FAC TS-09770-80.

Non-Sparking Static Disseminating Concrete Floors should be tested for electrical resistance in conformance with recommendations of National Fire Protection Association Bulletin 56 (NFPA #56).

**PRECAUTIONS:**

**Installation**

Do not use on floors exposed to acids, wet or damp conditions, or where non slip surfaces are required.

For static disseminating installations, extreme care should be taken so that the conductive metallic aggregate is in full and firm contact with grounding discs, studs, or rods. The surfaces should not be floated or troweled excessively in a manner to bury the metallic aggregate.
The above specification represents Anti-Hydro International’s best information on the proper application of A-H® NON-SPARKING METALLIC HARDENER.

Suitability of the final floor surface for the particular application should be based on the results of the standard tests for resistance. To prevent delamination of the surface, maintain a maximum of 3% entrained air.

In order to obtain required spark resistance it is mandatory to apply the full 180 lbs. of A-H® NON-SPARKING METALLIC HARDENER and A-H® CONDUCTIVE CURE ~(click me Spec.6-2B) as specified.

Safety-
A-H® NON-SPARKING METALLIC is a cement based product. Use approved safety goggles, work gloves, breathing mask, coveralls, work boots, and ventilation methods. KEEP AWAY FROM CHILDREN. Refer to the product MSDS (Material Safety Data Sheet) for more details.

Storage-
Store in a dry, cool area. Keep bags tightly closed. KEEP AWAY FROM CHILDREN. Refer to the MSDS for more details.

MAINTENANCE:
All due diligence must be exercised to provide a regular and frequent maintenance plan to clean and protect the finished surface from severe or prolonged assault from chemical attack, abrasive attack or similar abuse.

PACKAGING:
60 lb. bag (lined, multi wall, paper).
A-H® NON-SPARKING METALLIC HARDENER has a limited shelf life (it is a cement based product).

SERVICES:
Our technical staff is available to review product selection and detailing during the design stage, provide proper field guidance during the installation stage, evaluate concrete construction problems on-site and make recommendation.

ESTIMATOR’S DATA GUIDE:
180 lbs. A-H® NON-SPARKING METALLIC HARDENER per 100 ft².
200 sq. ft. per gallon for A-H® CONDUCTIVE CURE ~(click me Spec.6-2B).

WARRANTY: Anti-Hydro International, Inc. (Anti-Hydro) warrants its products to be free of manufacturing defects at the time of delivery to its customer and will, at its option, replace or refund the invoiced price of any materials proven to be defective. This limited warranty is in lieu of any other warranty or guarantee, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Anti-Hydro disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever beyond the invoiced price of the material to its customer.

To the best of our knowledge, the information contained herein is accurate. However Anti-Hydro International, Inc. does not assume liability whatsoever for the accuracy or completeness of information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present known or unknown hazards, please refer to the Material Safety Data Sheet (MSDS) for this product. This notification may not be detached from the specification. Any copying and redistribution of the specification shall also include copying and redistribution of this notice. Our sales persons or representatives, distributors and their personnel have no authority to change the recommendations contained herein.