



ASN GUARD
Long Term Antimicrobial Surface Coating
(Material Safety Data Sheet)

SECTION 1- CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Long Term Antimicrobial Surface Coating
Product Variants: 90 Days & 30 Days
Synonyms: Quarternary Ammonium Compound (with 4% Vol Denatured Industrial Ethanol)
Manufacturers Name: Materra Solutions Pte. Ltd.
Address: No.7 Soon Lee Street, #02-04 ISpace, Singapore 627608
For Further Product Information:
Phone Number: +65-96617496
Email: info@asntechnologies.sg
Website: www.asnguard.com

Recommended Use: Preparation on the basis of modified hybrid materials in a watery solution for the dirt repellent and antimicrobial coating for various surfaces including fabrics, glass, stone, plastic, metal, latex paint, tiles, etc...

SECTION 2- HAZARDS IDENTIFICATION

Signal Word: No signal word.

Hazard Statements:

OSHA/HCS status:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
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Precautionary Statements:

Wash skin thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If SWALLOWED: Rinse mouth. Get medical attention if symptoms occur
If ON SKIN: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
If INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Collect spillage.
Dispose of content/container to an approved waste disposal plant.

SECTION 3- COMPOSITION INFORMATION

Quaternary Ammonium Compound & Water (with 4% Vol Denatured Industrial Ethanol)

Trade Secret Statement: The exact percentage of each component has been withheld as this information is considered a trade secret.

SECTION 4- FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, provide oxygen and get medical attention immediately.

Ingestion: If swallowed, do not induce vomiting. Get medical attention immediately.

Skin Contact: Wash skin with flowing water. Obtain medical attention if irritation persists.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyes open. Contact lens should be removed before or during flushing. Do not instruct person to neutralize. Get medical attention.

SECTION 5- FIRE FIGHTING MEASURES

Fire Fighting Procedures: Use an extinguishing agent suitable for the surrounding fire.

Fire and Explosion Hazards: No specific fire or explosion hazard.

Hazardous Products of Thermal Decomposition and/or Combustion: No Specific Data

Special Information: No special measures are required

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

NFPA Ratings: Health- 0 Flammability- 0 Reactivity- 0 Other- None.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up Spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see

Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7- HANDLING AND STORAGE

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8- PERSONAL PROTECTION/EXPOSURE CONTROL

Control parameters

Occupational exposure limits: No exposure limits have been developed.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Not required under normal conditions of use.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Colorless with slight odor.

Vapor Pressure and Density: Not determined.

Boiling Point: 97.8 °C (208 °F)

Melting Point: Not Available

Relative Density: 0.998 at 25°C.

Solubility in Water: Complete.

Volatile Percentage: Not applicable.

pH: 6-6.5

Flash Point/Method: Closed cup: > 79.44 oC (179 oC) [Pensky Martens.]

Evaporation Rate: Not available.

Auto Ignition Temperature: Not available.

Decomposition Temperature: Not available.

Viscosity: 57cPS

SECTION 10- STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11- TOXICOLOGICAL INFORMATION

Inhalation: No known significant effects or critical hazards.

Skin Contact: No known significant effects or critical hazards.

Eye Contact: Eye contact causes severe irritation with redness and pain.

Ingestion: No known significant effects or critical hazards.

Carcinogenicity/Mutagenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Reproductive Effects: No reproductive effects for this product are known.

Neurotoxicity: None are known.

Other Effects: None are known.

Target Organs: Skin, eyes, respiratory tract, and digestive system.

SECTION 12- ECOLOGICAL INFORMATION

Ecotoxicity: This product may be toxic to aquatic organisms. Do not allow to enter streams, lakes, etc.

SECTION 13- DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14- TRANSPORTATION INFORMATION

	DOT	TDG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No	No	No	No
Additional information	-	-	-	-

AERG: Not applicable.

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15- REGULATORY INFORMATION

CERCLA SECTION 103 (40CFR302.4): No
SARA SECTION 302 (40CFR355.30): No.
TSCA SECTION 304 (40CFR355.40): No.
SARA SECTION 313 (40CFR372.65): No.
OSHA PROCESS SAFETY (29CFR1910.119): No.
CALIFORNIA PROPOSITION 65: No.

RCRA (40CFR261 Subpart C): If this product becomes a waste, it does not meet the definition of a characteristic waste, and no other EPA hazardous waste codes are applicable.

SECTION 16- OTHER INFORMATION

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NFPA Ratings: Health- 0 Flammability- 0 Reactivity- 0 Special Notice Key- None.

HMIS Ratings: Health- 0 Flammability- 0 Reactivity- 0 Protective Equipment- B (Protective eyewear, gloves).

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.