

INFORMATION LEAFLET

DRDO SHOE SANITIZER

Need

It has been proved beyond doubt that Shoes are one of the main causes of spread of the viruses, from the streets to homes, offices and hospitals. Within COVID wards, 65 % of samples from shoes worn by the health staff showed Corona Virus.

Device Components:

1. Mat made of PVC with threading to retain moisture. Artificial grass is the second choice. Rubber & Coir mats are not suitable.
2. Mat size 2 ft X 3.5 feet
3. There will be a dividing thread separating the portion of mat to be sprinkled with chemical (initial 1.5 ft) and the larger portion will be used as such for shoe wiping purpose (distant 2 ft).
4. 150 ppm sodium hypochlorite gel in a bottle/can

Innovation:

1. 0.015% Sodium hypochlorite gel was created to enhance efficacy (due to retained moisture and free chlorine) . Its stability and chlorine retention were optimized.
2. A gel was created that does not stick to the shoes or the mat and leaved minimal imprint that can be wiped off easily.
3. Mat design chosen to maximize effect and to ensure that shoe sanitization and shoe cleaning can be done by the same mat
4. Continuing bacteriology tests showing 2-log scale kill effect.
5. More safe to handle than the corrosive parent solution

Standard Operative Procedure

1. The gel should be stored in glass / HDPE grade plastic bottles.
2. Clean the mat with plain water to discard any organic material or acidity on its surface.
3. 50 ml gel will be spread over per sq ft (only on the smaller mat portion divided by the thread) . The gel can be submerged by a

wipe or shoes till no white color is seen. It can be used immediately.

4. Should not be put in open sunlight. It will reduce efficiency.
5. The person will use the sanitizer mat from Width portion. He will stand on it for 20 seconds. He is allowed to slide or rotate the shoes for this period of the time within the marked portion.
6. One Gel Spread is valid for 15 people / 2 hrs. It can be recharged with more gel for repeat action or water may be sprinkled for repeat use by another 10 people, but they will stand for 30 seconds.
7. The mat may be cleaned with running water every 2 hours
8. No shoe discoloration or damage noticed till 20 hr immersion / contact Testing.

Where should the door mats be put?

- At the entrance of main office buildings
- At the door of office rooms
- Rooms frequented crowds: cafeteria, Meeting Rooms
- Home Entrance

Added Safety Measures

1. Use of rubber gloves advisable.
2. Wash hands after handling of the bottle.

For Further Information, contact:

Director

Institute of Nuclear Medicine & Allied Sciences (INMAS)

Brig S K Mazumdar Marg

Delhi-10054

23905105,106

INFORMATION LEAFLET

DRDO CAR TYRE SANITIZER

Need

When cars enter Office or Home premises, the tyres bring in virus from the contaminated streets. This route of infection spread is not very well appreciated nor a cheap and universally applicable remedy has been suggested till now.

Device Components:

1. Mat made of PVC with threading to retain moisture. Artificial grass is the second choice. Rubber & Coir mats are not suitable.
2. Mat size 2X6 feet: running as a pair to accommodate the tyre width
3. In case of different vehicle requirements, the mat length and width can vary as per need.
4. 200 ppm sodium hypochlorite gel in a 5 L / 20 L can

Innovation:

1. 0.02% Sodium hypochlorite gel was created to enhance efficacy (due to retained moisture and free chlorine) . Its stability and chlorine retention were optimized.
2. A gel was created that does not stick to the tyres or the mat and leaved minimal imprint though the tyre rubber is wetted properly.
3. Mat design / texture chosen to maximize effect
4. Continuing bacteriology tests showing 2-log scale kill effect.
5. More safe to handle than the corrosive parent solution

Standard Operative Procedure

1. The gel should be stored in HDPE grade cans
2. Clean the mat with plain water to discard any organic material or acidity on its surface.
3. 70 ml gel will be spread over per sq ft (only on the smaller mat portion divided by the thread) . The gel can be submerged by a wipe or shoes till no white color is seen. It can be used immediately.

4. Should not be put in open sunlight. It will reduce efficiency.
5. The driver will use the sanitizer mat from Width portion. He will stand on it for 20 seconds. He is allowed to slide or rotate the shoes for this period of the time within the marked portion.
6. One Gel Spread is valid for 15 cars / 2 hrs. It can be recharged with more gel for repeat action or water may be sprinkled for repeat use by another 5 cars, but they will stand for 30 seconds.
7. The mat may be cleaned with running water every 2 hours
8. No tyre discoloration or damage noticed till 20 hr immersion / contact Testing.

Where should the door mats be put?

- At the entrance of main office buildings
- Home Entrance

Added Safety Measures

3. Use of rubber gloves advisable.
4. Wash hands after handling of the bottle.

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