

2021-0923  
2021-03-03

ARMOHIB® 654  
(Solution in Ethylene Glycol)

For Use as an Oilfield Biocide

REGISTRATION NO. 19339  
PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

COMMERCIAL

ACTIVE INGREDIENT:

1-Alkyl\*-1,3-Propanediamine Diacetate.....20.0%  
(\*Alkyl groups as derived from coconut oil fatty acids)(7% C8, 6.5% C10, 53% C12,  
19% C14, 8.5% C16, 6% C18)

NET CONTENTS: 200.0 kg

DANGER

POISON CORROSIVE

CORROSIVE TO EYES

NOURYON CHEMICALS LTD.  
200 Bay Street, Suite 3800  
Royal Bank Plaza, South Tower  
Toronto, ON  
Canada M5J 2Z4

EMERGENCY TELEPHONE NUMBERS  
TRANSPORTATION EMERGENCIES ONLY  
Canada/Canutec:1-613-996-6666

ALL OTHER EMERGENCIES  
Nouryon Chemicals Ltd.1-306-242-3855

Made in Canada

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PRECAUTIONS  
KEEP OUT OF REACH OF CHILDREN  
DANGER! CORROSIVE!

-THIS PRODUCT CONTAINS ETHYLENE GLYCOL. EXCESSIVE EXPOSURE TO ETHYLENE GLYCOL HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN ANIMAL TESTS.

-HARMFUL OR FATAL IF SWALLOWED.

-CAUSES EYE AND SKIN BURNS.

-Use only in well-ventilated areas.

-Wear goggles or face shield, chemical-resistant gloves, long pants, a long sleeve shirt, and shoes and socks when handling.

- Wash thoroughly with soap and water after handling.

-Avoid contamination of food.

#### FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: CONTAINS ETHYLENE GLYCOL. There is no specific antidote. Probable mucosal damage may contraindicate use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion, may be needed.

#### DIRECTIONS FOR USE

Apply the product using a closed delivery system such as a dry coupling and/or metering pump.

**SECONDARY OIL PRODUCTION:** For the control of algae, slime forming and sulphate reducing bacteria in oilfield waterflood slug, treat at a rate up to 1000 ppm for up to 6 hours as needed, to achieve control. Repeat treatment once a week or as needed to maintain control. For continuous treatment, up to 300 ppm can be used initially to achieve control with maintenance levels of up to 150 ppm. Levels for effective control will vary depending on conditions at site.

**WELL COMPLETIONS, WORKOVER AND STIMULATION FLUIDS:** For control of algae, slime forming and sulphate reducing bacteria, dosage levels of up to 1500 ppm in normal situations and up to 3000 ppm or severe contamination is suggested. In packer fluids, doses up to 300 ppm are recommended.

**PETROLEUM TRANSPORT, STORAGE SYSTEMS AND SURFACE EQUIPMENT:** To control bacteria in crude oil pipelines, slug dose with up to 19.5 litres per centimetre of diameter per kilometre of pipeline. Repeat weekly or as needed to control situation. The appropriate doses will depend on the severity of the problem. Up to 150 ppm can be used in water for hydrostatic testing and in treatment of water and crude oil storage facilities. This water should be used in sub-surface injections systems only.

#### STORAGE

Container should be stored in a cool, dry and well-ventilated area. Keep container tightly closed when not in use. Exercise due caution to prevent damage to or leakage from the container. Do not use air pressure to transfer. Do not reuse empty container.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish. Toxic to birds. Toxic to aquatic organisms. Not for use in marine or estuarine oilfields. DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters. Open dumping is prohibited.

#### DISPOSAL:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the treatment site.
2. Follow provincial/territorial instructions for any required additional cleaning of the container prior to its disposal or reconditioning.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial/territorial requirements.
5. For information on the disposal of unused or unwanted product and the cleanup of spills, please contact the Provincial/Territorial Agency or the Manufacturer.

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**SPILLAGE:** Clean up spills immediately. For small spills, recover free liquid. Soak up residue with solid absorbent. Larger spills should be flushed to a collection basin for disposal. Clean area well with detergent and water. **DO NOT FLUSH INTO SURFACE STREAMS. INFORM THE REGULATORY AGENCY AS INDICATED ABOVE IN # 5.**

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.