

| Material Safety Data Sheet (MSDS)              |     |  |               |  |  |  |  |
|--|-----|--|---------------|--|--|--|--|
| 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION |     |  |               |  |  |  |  |
| Trade Name                                     | :   | Benzalkoniui   | m Chloride    |  |  |  |  |
| Manufacture's Name                             | :   | Allied Chemi   | icals SC      |  |  |  |  |
| Address  |     | Kebele - 9, Near to Adama Steel,   |               |  |  |  |  |
|  |     | Adama Expressway, Adama ,Oromia  |               |  |  |  |  |
| Office   | :   | Room No 405, H& M Building,  |               |  |  |  |  |
|  |     | Opposite Hayaulat LRT Station,   |               |  |  |  |  |
|  |     | H/Gebreselassie Road , Addis Ababa, Ethiopia.  |               |  |  |  |  |
|  |     |  |               |  |  |  |  |
|  |     | Email: allied  | cls@gmail.com |  |  |  |  |
| Telephone                                      | :   | 011-6182354  |               |  |  |  |  |
| 2. COMPOSITION / INGREDIENTS                   |     |  |               |  |  |  |  |
| Average Molecular<br>Weight                    | :   | 283.88   |               |  |  |  |  |
| Chemical Identity                              | :   | CAS No.  | Weight Range  |  |  |  |  |
| WATER  |     | 7732-18-5  | 20%           |  |  |  |  |
| N-Alkyldimethylbenzyl                          |     | 8001-54-5  | 80%           |  |  |  |  |
| ammonium chloride                              |     |  |               |  |  |  |  |
| 3. HAZARD IDENTIFIC                            | CA  | TION   |               |  |  |  |  |
| Health Rating                                  | :   | Moderate   |               |  |  |  |  |
| Flammability Rating                            | :   | Slight   |               |  |  |  |  |
| Reactivity Rating                              | :   | Slight   |               |  |  |  |  |
| Contact Rating                                 | :   | Slight   |               |  |  |  |  |
| Storage  | :   | General  |               |  |  |  |  |
| 4. FIRST AID MEASUR                            | RES | 5  |               |  |  |  |  |
| Еуе  | :   | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.        |               |  |  |  |  |
| Skin   | :   | Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician |               |  |  |  |  |



|  | immediately.  |  |  |  |  |
|--|---|--|--|--|--|
| :  | Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device Remove from exposure, lie down. Call a physician immediately. If not breathing, give artificial respiration. |  |  |  |  |
| :  | Do NOT induce vomiting. Never give anything by mouth to<br>an unconscious person. Clean mouth with water. Call a<br>physician immediately.  |  |  |  |  |
| *In all of the above cases, get a doctor to check the affected person. |   |  |  |  |  |
|  |   |  |  |  |  |
| 5. FIRE HAZARD AND FIRE-FIGHTING MEASURES                              |   |  |  |  |  |
| :  | 250°C   |  |  |  |  |
| ;  | Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from firefighting to enter drains or water courses.   |  |  |  |  |
| ;  | Flammable.  |  |  |  |  |
| :  | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.  |  |  |  |  |
| :  | Thermal decomposition can lead to release of irritating   |  |  |  |  |
|  | gases and vapors.   |  |  |  |  |
| SE   |   |  |  |  |  |
| :  | Ventilation of workplace.   |  |  |  |  |
| ;  | Do not flush into surface water or sanitary sewer system.  Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.  |  |  |  |  |
|  | Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.  |  |  |  |  |
|  | FI :  |  |  |  |  |



| UP                                  |    |   |  |  |  |  |
|-------------------------------------|----|---|--|--|--|--|
| 7. HANDLING AND ST                  | OR | RAGE MEASURES   |  |  |  |  |
| Handling Containers                 | :  | Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance.       |  |  |  |  |
| Storage Conditions of<br>Containers | :  | Keep containers tightly closed in a dry, cool and well-<br>ventilated place. Corrosives area. Incompatible Materials.<br>Strong oxidizing agents. Strong acids. Strong bases.<br>Metals   |  |  |  |  |
| 8. PERSONAL PROTECTION MEASURES     |    |   |  |  |  |  |
| Skin                                | :  | Wear appropriate protective gloves and clothing to prevent skin exposure.   |  |  |  |  |
| Respiratory protection              | :  | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |  |  |  |  |
| Eyes                                | ;  | Wear appropriate protective eyeglasses or chemical safety goggles.  |  |  |  |  |
| Feet                                | :  | Safety Shoes/Gum Boots.   |  |  |  |  |
| Body                                | :  | Aprons.   |  |  |  |  |
| Hygiene precautions                 | :  | Handle in accordance with good industrial hygiene and safety practice.  |  |  |  |  |
| 9. PHYSICAL AND CHE                 | M  |   |  |  |  |  |
| Physical state                      | :  | Liquid.   |  |  |  |  |
| Appearances                         | :  | Clear Colourless liquid   |  |  |  |  |
| рН                                  | :  | 7.5±1 in 10% aq.sol.  |  |  |  |  |
| Odor                                | :  | Not available   |  |  |  |  |
| Decomposition temperature           | :  | >140°C  |  |  |  |  |
| Specific gravity                    | :  | 0.980   |  |  |  |  |
| Boiling point                       | :  | >100°C  |  |  |  |  |
| Melting point                       | :  | Not available   |  |  |  |  |
| Viscosity                           | :  | 130 mPa.s at 20 °C  |  |  |  |  |
| Solubility in water.                | :  | Miscible  |  |  |  |  |



| 40 05 45 15 15 15 15 15 15 15 15 15 15 15 15 15 |                              |  |  |  |  |  |
|---|------------------------------|--|--|--|--|--|
| 10. REACTIVITY DATA                             |                              |  |  |  |  |  |
| Chemical Stability                              | ;                            | Stable under with normal conditions.                             |  |  |  |  |
| Incompatibility with                            | :                            | Strong oxidizing agents, Strong acids, Strong bases,             |  |  |  |  |
| other Substances                                |                              | Metals.  |  |  |  |  |
| Reactivity and under                            | :                            | None known, based on information available.                      |  |  |  |  |
| what conditions                                 |                              |  |  |  |  |  |
| Hazardous                                       | :                            | Incompatible products. Excess heat. Thermal                      |  |  |  |  |
| Decomposition                                   |                              | decomposition can lead to release of irritating gases and vapors |  |  |  |  |
| 11. TOXICOLOGICAL P                             | 11. TOXICOLOGICAL PROPERTIES |  |  |  |  |  |
| Toxicity  | :                            | Not available  |  |  |  |  |
| Skin contact                                    | :-                           | May cause severe skin irritation                                 |  |  |  |  |
| Inhalation acute                                | :                            | May cause respiratory irritation. Excessive inhalation           |  |  |  |  |
|   |                              | causes headache, dizziness,                                      |  |  |  |  |
|   |                              | nausea and in coordination.                                      |  |  |  |  |
| Skin absorption                                 | :                            | None   |  |  |  |  |
| Inhalation Chronic                              | :                            | None   |  |  |  |  |
| Eye contact                                     |                              | May cause eye irritation. May cause corneal injury.              |  |  |  |  |
| Ingestion                                       | :                            | Irritation of the mouth, throat, and stomach. May cause          |  |  |  |  |
|   |                              | abdominal pain, vomiting, nausea, and diarrhea.                  |  |  |  |  |
| Effect of Acute and                             | :                            | Not Applicable.  |  |  |  |  |
| Chronic Exposure to                             |                              |  |  |  |  |  |
| Material  |                              |  |  |  |  |  |
| Irritancy of material                           | ••                           | Slight   |  |  |  |  |
| Carcinogenicity,                                | :                            | BKC is not known to be a human or animal carcinogen.             |  |  |  |  |
| Reproductive Effects,                           |                              |  |  |  |  |  |
| Teratogenicity,                                 |                              |  |  |  |  |  |
| Mutagenicity                                    |                              |  |  |  |  |  |
| 12. ECOLOGICAL INFO                             | R۸                           | MATION   |  |  |  |  |
| Not Applicable.                                 |                              |  |  |  |  |  |
| 13. WASTE DISPOSAL                              |                              |  |  |  |  |  |
| Leak-and-spill                                  | :                            | It can be collected, cleaned up and stored in closed             |  |  |  |  |
| procedures                                      |                              | containers.  |  |  |  |  |
| Disposal  | :                            | Chemical waste generators must determine whether a               |  |  |  |  |



discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT RECOMMENDATION

No special condition, as it is not a regulated product. However, one should observe the usual

precautionary measures for transporting chemicals.

## 15. REGULATORY REQUIREMENTS

According to the data available, the product is not regulated product. However, one should observe prescribed Federal, State and Local measures while dealing with chemicals.

## 16. OTHER INFORMATION

The information presented here pertains only to the product when stored in a condition, as prescribed above. The information is given in good faith, but no warranty, express or implied, is made.