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| Material Safety Data Sheet<br>Sodium bromide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    |                          |  |
| ACC# 21060                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                                    |                          |  |
| Section 1 - Chemical Product and Company Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |                                    |                          |  |
| <b>MSDS Name:</b> Sodium bromide<br><b>Catalog Numbers:</b> AC205130010, AC205131000, AC246900000, AC246901000, AC246905000, 5255-3, 5255-500<br><b>Synonyms:</b> Bromide salt of sodium<br><b>Company Identification:</b><br>Fisher Scientific<br>1 Reagent Lane<br>Fair Lawn, NJ 07410<br><b>For information, call:</b> 201-796-7100<br><b>Emergency Number:</b> 201-796-7100<br><b>For CHEMTREC assistance, call:</b> 800-424-9300<br><b>For International CHEMTREC assistance, call:</b> 703-527-3887                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |                                    |                          |  |
| Section 2 - Composition, Information on Ingredients                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| <b>CAS#</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Chemical Name</b>           | <b>Percent</b>                     | <b>ELINCS/ELINCS</b>     |  |
| 7647-15-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sodium bromide                 | >99                                | 231-599-9                |  |
| Section 3 - Hazards Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                    |                          |  |
| <b>EMERGENCY OVERVIEW</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |                                    |                          |  |
| Appearance: white crystalline powder.<br><b>Caution!</b> Causes mild eye irritation. Hygroscopic (absorbs moisture from the air).<br><b>Target Organs:</b> Central nervous system.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                    |                          |  |
| <b>Potential Health Effects</b><br><b>Eyes:</b> Causes mild eye irritation.<br><b>Skin:</b> May cause skin irritation. May be harmful if absorbed through the skin.<br><b>Ingestion:</b> May cause irritation of the digestive tract. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. May be harmful if swallowed.<br><b>Inhalation:</b> Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. May be harmful if inhaled.<br><b>Chronic:</b> Chronic ingestion may cause central nervous system failure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                                    |                          |  |
| Section 4 - First Aid Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                    |                          |  |
| <b>Eyes:</b> Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.<br><b>Skin:</b> Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.<br><b>Ingestion:</b> Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupsful of milk or water.<br><b>Inhalation:</b> Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.<br><b>Notes to Physician:</b> Treat symptomatically and supportively.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |                                    |                          |  |
| Section 5 - Fire Fighting Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                    |                          |  |
| <b>General Information:</b> As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.<br><b>Extinguishing Media:</b> Use water spray, dry chemical, carbon dioxide, or appropriate foam.<br><b>Flash Point:</b> Not applicable.<br><b>Autoignition Temperature:</b> Not available.<br><b>Explosion Limits, Lower:</b> N/A<br><b>Upper:</b> N/A<br><b>NFPA Rating:</b> (estimated) Health: 1; Flammability: 1; Instability: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |                                    |                          |  |
| Section 6 - Accidental Release Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |                                    |                          |  |
| <b>General Information:</b> Use proper personal protective equipment as indicated in Section 8.<br><b>Spills/Leaks:</b> Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |                                    |                          |  |
| Section 7 - Handling and Storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                |                                    |                          |  |
| <b>Handling:</b> Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.<br><b>Storage:</b> Store in a cool, dry place. Store in a tightly closed container. Store protected from moisture.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                                    |                          |  |
| Section 8 - Exposure Controls, Personal Protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                    |                          |  |
| <b>Engineering Controls:</b> Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.<br><b>Exposure Limits</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| <b>Chemical Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>ACGIH</b>                   | <b>NIOSH</b>                       | <b>OSHA - Final PELs</b> |  |
| Sodium bromide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | none listed                    | none listed                        | none listed              |  |
| <b>OSHA Vacated PELs:</b> Sodium bromide: No OSHA Vacated PELs are listed for this chemical.<br><b>Personal Protective Equipment</b><br><b>Eyes:</b> Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.<br><b>Skin:</b> Wear appropriate gloves to prevent skin exposure.<br><b>Clothing:</b> Wear appropriate protective clothing to minimize contact with skin.<br><b>Respirators:</b> 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| Section 9 - Physical and Chemical Properties                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    |                          |  |
| <b>Physical State:</b> Crystalline powder<br><b>Appearance:</b> white<br><b>Odor:</b> not available<br><b>pH:</b> 5-8 (5% aq soln)<br><b>Vapor Pressure:</b> Not applicable.<br><b>Vapor Density:</b> Not available.<br><b>Evaporation Rate:</b> Not applicable.<br><b>Viscosity:</b> Not available.<br><b>Boiling Point:</b> 1390 deg C @ 760 mmHg<br><b>Freezing/Melting Point:</b> 755 deg C<br><b>Decomposition Temperature:</b> 500 deg C<br><b>Solubility:</b> 95g/100 ml water (25°C)<br><b>Specific Gravity/Density:</b> 3.208<br><b>Molecular Formula:</b> NaBr<br><b>Molecular Weight:</b> 102.89                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                |                                    |                          |  |
| Section 10 - Stability and Reactivity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |                                    |                          |  |
| <b>Chemical Stability:</b> Hygroscopic; absorbs moisture or water from the air.<br><b>Conditions to Avoid:</b> Incompatible materials, dust generation, heating to decomposition, exposure to moist air or water.<br><b>Incompatibilities with Other Materials:</b> Strong acids, bromine trifluoride.<br><b>Hazardous Decomposition Products:</b> Hydrogen bromide, sodium oxide, bromine fumes.<br><b>Hazardous Polymerization:</b> Has not been reported.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    |                          |  |
| Section 11 - Toxicological Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                                    |                          |  |
| <b>RTCS#:</b><br><b>CAS#</b> 7647-15-6; VZ3150000<br><b>LD50/LC50:</b><br><b>CAS#</b> 7647-15-6:<br>Oral, mouse: LD50 = 7 gm/kg;<br>Oral, rat: LD50 = 3500 mg/kg;<br>.<br><b>Carcinogenicity:</b><br><b>CAS#</b> 7647-15-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.<br><b>Epidemiology:</b> No information available.<br><b>Teratogenicity:</b> No information found.<br><b>Reproductive Effects:</b> Adverse reproductive effects have occurred in experimental animals.<br><b>Mutagenicity:</b> No information available.<br><b>Neurotoxicity:</b> No information available.<br><b>Other Studies:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                    |                          |  |
| Section 12 - Ecological Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| <b>Ecotoxicity:</b> Fish: Bluegill/Sunfish: >1000 mg/L; 96 h; LC50<br>Daphnia: Daphnia: >1000 mg/L; 48 h; LC50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                    |                          |  |
| Section 13 - Disposal Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                |                                    |                          |  |
| Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.<br><b>RCRA P-Series:</b> None listed.<br><b>RCRA U-Series:</b> None listed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                                    |                          |  |
| Section 14 - Transport Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                    |                          |  |
| <b>Shipping Name:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>US DOT</b><br>Not regulated | <b>Canada TDG</b><br>Not Regulated |                          |  |
| <b>Hazard Class:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>UN Number:</b>              |                                    |                          |  |
| <b>Packing Group:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |                                    |                          |  |
| Section 15 - Regulatory Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| <b>US FEDERAL</b><br><b>TSCA</b><br><b>CAS#</b> 7647-15-6 is listed on the TSCA inventory.<br><b>Health &amp; Safety Reporting List</b><br>None of the chemicals are on the Health & Safety Reporting List.<br><b>Chemical Test Rules</b><br>None of the chemicals in this product are under a Chemical Test Rule.<br><b>Section 12b</b><br>None of the chemicals are listed under TSCA Section 12b.<br><b>TSCA Significant New Use Rule</b><br>None of the chemicals in this material have a SNUR under TSCA.<br><b>CERCLA Hazardous Substances and corresponding RQs</b><br>None of the chemicals in this material have an RQ.<br><b>SARA Section 302 Extremely Hazardous Substances</b><br>None of the chemicals in this product have a TPO.<br><b>Section 313</b> No chemicals are reportable under Section 313.<br><b>Clean Air Act:</b><br>This material does not contain any hazardous air pollutants.<br>This material does not contain any Class 1 Ozone depleters.<br>This material does not contain any Class 2 Ozone depleters.<br><b>Clean Water Act:</b><br>None of the chemicals in this product are listed as Hazardous Substances under the CWA.<br>None of the chemicals in this product are listed as Priority Pollutants under the CWA.<br>None of the chemicals in this product are listed as Toxic Pollutants under the CWA.<br><b>OSHHA:</b><br>None of the chemicals in this product are considered highly hazardous by OSHA.<br><b>STATE</b><br><b>CAS#</b> 7647-15-6 is not present on state lists from CA, PA, MI, MA, FL, or NJ.<br><b>California Prop 65</b><br>California No Significant Risk Level: None of the chemicals in this product are listed. |                                |                                    |                          |  |
| <b>European/International Regulations</b><br><b>European Labeling in Accordance with EC Directives</b><br><b>Hazard Symbols:</b><br>Not available.<br><b>Risk Phrases:</b><br><b>Safety Phrases:</b><br>S 24/25 Avoid contact with skin and eyes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                |                                    |                          |  |
| <b>WGK (Water Danger/Protection)</b><br><b>CAS#</b> 7647-15-6: 1<br><b>Canada - DSL/NIOSH</b><br><b>CAS#</b> 7647-15-6 is listed on Canada's DSL List.<br><b>Canada - WHMIS</b><br>not available.<br>This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.<br><b>Canadian Ingredient Disclosure List</b><br><b>CAS#</b> 7647-15-6 is listed on the Canadian Ingredient Disclosure List.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    |                          |  |
| Section 16 - Additional Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |                                    |                          |  |
| <b>MSDS Creation Date:</b> 12/12/1997<br><b>Revision #3 Date:</b> 3/15/2005<br><br><i>The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, when it further has been advised of the possibility of such damages.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                |                                    |                          |  |