

**Buckeye International, Inc.**

2700 Wagner Place  
Maryland Heights, MO 63043  
314/291-1900

**N. F. P. A.**

4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

|  |            |   |
|--|------------|---|
|  | HEALTH     | 0 |
|  | FIRE       | 0 |
|  | REACTIVITY | 0 |

**Material Safety Data Sheet**

24 Hour Medical Emergency Telephone Number: 1-800-228-5635. Outside North America call : 651-632-8946.

24 Hour Transportation Emergency Telephone Number: 1-800-535-5053. Outside North America call : 352-323-3500.

**SECTION I - IDENTIFICATION**

|                 |                                           |               |                  |
|-----------------|-------------------------------------------|---------------|------------------|
| PRODUCT NAME    | BUCKEYE XL-100                            | DATE PREPARED | January 31, 2003 |
| CHEMICAL FAMILY | Heavy Duty Cleaner Degreaser, Water Based | CODE          | 5050             |
| PROPER D.O.T.   |                                           |               |                  |
| SHIPPING NAME   | Compound, Cleaning, Liquid                |               |                  |
| D.O.T. HAZARD   |                                           |               |                  |
| CLASSIFICATION  | None                                      |               |                  |

**SECTION II - INGREDIENTS AND IDENTITY INFORMATION**

| % By WGT | MATERIAL                                     | PEL | T.L.V. | C.A.S. NO. |
|----------|----------------------------------------------|-----|--------|------------|
| >83.0    | Water                                        | NE  | NE     | 7732-18-5  |
| <5.0     | Nonyl Phenoxypolyethoxy Ethanol              | NE  | NE     | 68412-54-4 |
| <5.0     | Dipropylene Glycol n-Butyl Ether             | NE  | NE     | 29911-28-2 |
| <5.0     | Tetrasodium Ethylenediaminetetraacetate      | NE  | NE     | 64-02-8    |
| <2.0     | Perfume, coloring and additives less than 1% | NA  | NA     | NA         |
|          |                                              |     |        |            |
|          |                                              |     |        |            |
|          |                                              |     |        |            |
|          |                                              |     |        |            |

ITEMS MARKED \* ARE SARA TITLE III SEC 313 REPORTABLES. ALL INGREDIENTS ARE ON TSCA INVENTORY.

**SECTION III - PHYSICAL DATA**

|                      |                              |                            |            |
|----------------------|------------------------------|----------------------------|------------|
| BOILING POINT °F     | 212°F                        | pH (CONC.)                 | 12.7 ± 0.2 |
| SOLUBILITY IN WATER  | Infinite                     | pH (USE DILUTION) 1:40     | 11.1 ± 0.2 |
| % VOLATILE BY WEIGHT | 95.0                         | EVAPORATION RATE (Water=1) | 1.0        |
| SPECIFIC GRAVITY     | 1.01                         | PRODUCT FORM               | Liquid     |
| APPEARANCE AND ODOR  | Citrus, Clear Green Solution |                            |            |

**SECTION IV - FIRE AND EXPLOSION DATA**

|                                    |                       |                  |                 |
|------------------------------------|-----------------------|------------------|-----------------|
| FLASH POINT (Test Method)          | Tag Closed Cup: None! | FLAMMABLE LIMITS |                 |
| EXTINGUISHING MEDIA                | NA                    | UPPER LIMIT: NA  | LOWER LIMIT: NA |
| SPECIAL FIRE FIGHTING PROCEDURES   | None                  |                  |                 |
|                                    |                       |                  |                 |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | Oxides of carbon.     |                  |                 |

**SECTION V - REACTIVITY DATA**

|                                  |                                  |
|----------------------------------|----------------------------------|
| STABILITY                        | Stable                           |
| CONDITIONS TO AVOID              | None determined.                 |
| INCOMPATIBILITY                  | Do not mix with chlorine bleach. |
| HAZARDOUS DECOMPOSITION PRODUCTS | None known.                      |
| HAZARDOUS POLYMERIZATION         | Will not occur.                  |

CODE: 5050

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------|
| <b>SECTION VI - HEALTH HAZARD DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| ROUTE(S) OF ENTRY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | INHALATION? No                                                                                                                                                                                                                                                                                                                                                      | SKIN? Yes              | INGESTION? No            |
| HEALTH HAZARDS (Acute and Chronic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| Slight eye irritant. Not irritating to skin. Not toxic by ingestion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| CARCINOGENICITY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NTP? No                                                                                                                                                                                                                                                                                                                                                             | IARC MONOGRAPHS? No    | OSHA REGULATED? No       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| SIGNS AND SYMPTOMS OF OVEREXPOSURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| For Eyes: Redness or burning sensation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| MEDICAL CONDITIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| GENERALLY AGGRAVATED BY EXPOSURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| None known.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| EMERGENCY AND FIRST AID PROCEDURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| For Eyes: Flush with cool water for 15 minutes. If irritation occurs and persists, see physician.                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| For Ingestion: Give two large glasses of water. DO NOT induce vomiting. Call physician.                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| Never give anything by mouth to an unconscious person.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| <b>SECTION VII - SPILL OR LEAK PROCEDURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| SPILL RESPONSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| Pick up with mop, wet/dry vac or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| WASTE DISPOSAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| METHOD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Flush to sanitary sewer or send to sanitary landfill, following local, state and federal laws.                                                                                                                                                                                                                                                                      |                        |                          |
| <b>SECTION VIII - SPECIAL PROTECTION INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| EYE PROTECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | When eye contact may occur, wear safety glasses or chemical splash goggles.                                                                                                                                                                                                                                                                                         | VENTILATION            | Normal room ventilation. |
| SKIN PROTECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Rubber gloves or other impervious gloves.*                                                                                                                                                                                                                                                                                                                          | RESPIRATORY PROTECTION | None required.           |
| OTHER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| PROTECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Wear water or chemical resistant footwear when scrubbing floors.<br>Follow good personal hygiene practices.<br>*Needed for clean up of spill or for possible prolonged skin contact.                                                                                                                                                                                |                        |                          |
| <b>SECTION IX - SPECIAL PRECAUTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| PRECAUTIONS IN HANDLING AND STORAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>KEEP OUT OF REACH OF CHILDREN!</b><br>Store at room temperature.<br>Keep container closed when not in use.                                                                                                                                                                                                                                                       |                        |                          |
| OTHER PRECAUTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | This product is not regulated under CERCLA. This product is not regulated under RCRA when product label and MSDS spill directions are followed. Not reportable under SARA Title III, Section 311/312. Product produced under one or more of the following U.S. Patents: 5,080,822; 5,080,831; 5,158,710; 5,419,848; 5,585,341 and 5,849,682. Other patents pending. |                        |                          |
| NA = Not Applicable<br>NE = Not Established                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                     |                        |                          |
| PREPARED BY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mark Gindling, Director of Research                                                                                                                                                                                                                                                                                                                                 |                        |                          |
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