



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ALUMINUM SAFE METAL CLEANER
PRODUCT NUMBER: 228
PRODUCT FAMILY: ALKALINE DETERGENT
MANUFACTURER: KO MANUFACTURING, INC
 2720 E. DIVISION STREET
 SPRINGFIELD, MO 65803
 417-866-8000

DATE PREPARED: 5/1/2014
SUPERCEDED DATE: 7/1/2013

EMERGENCY CONTACT: CHEMTREC 800-424-9300
INFORMATION USE: ALKALINE METAL CLEANER

2. HAZARD IDENTIFICATION

SIGNAL WORD: WARNING

HAZARD CLASSIFICATION: IRRITANT

POTENTIAL HEALTH EFFECT: SKIN IRRITANT; MAY IRRITATE OR BURN EYES

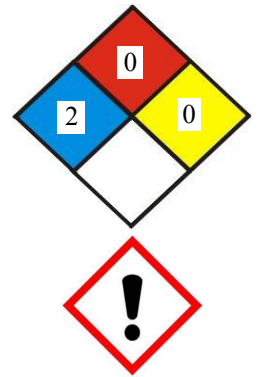
ROUTE OF EXPOSURE: EYE CONTACT, SKIN CONTACT, INGESTION

SKIN CONTACT: MAY CAUSE SKIN IRRITATION UPON PROLONGED CONTACT.

EYE CONTACT: MAY CAUSE SEVERE IRRITATION OR BURNS ON DIRECT CONTACT.

INGESTION: MAY CAUSE IRRITATION TO MOUTH, THROAT AND STOMACH

INHALATION: MAY CAUSE IRRITATION TO NOSE AND THROAT.



3.COMPOSITION IDENTIFICATION

INGREDIENTS:	C.A.S. NUMBER:	PERCENT:
SODIUM METASILICATE	6834-92-0	<35.0%
2-BUTOXYETHANOL	111-76-2	<4.0%
SODIUM CARBONATE	497-19-8	<45.0%
SODIUM NITRITE	7632-00-0	<3.0%
PROPRIETARY SURFACTANT BLEND	BLEND	<10.0%

4. FIRST AID MEASURES

EYE CONTACT: RINSE WITH FRESH WATER FOR 15 MINUTES, LIFTING EYELIDS OCCASIONALLY. CALL A PHYSICIAN IF IRRITATION PERSISTS.

SKIN CONTACT: RINSE WITH PLENTY OF FRESH WATER AND REMOVE CONTAMINATED CLOTHING IMMEDIATELY. CALL A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER. DO NOT GIVE ANYTHING BY MOUTH IF UNCONSCIOUS.

INHALATION: IF OVERCOME BY EXPOSURE, REMOVE VICTIM TO FRESH AIR IMMEDIATELY. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. CALL A PHYSICIAN IMMEDIATELY.

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5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: NON FLAMMABLE.

FLASH POINT: DOES NOT FLASH.

SUITABLE EXTINGUISHING MEDIA: FOAM OR CARBON DIOXIDE, WATER SPRAY.

UNSUITABLE EXTINGUISHING MEDIA: AMMONIUM PHOSPHATE DRY CHEMICAL

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: NONE KNOWN.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: WEAR SELF-CONTAINED BREATHING APPARATUS (PRESSURE DEMAND MSHA/NIOSH APPROVED) AND FULL PROTECTIVE GEAR.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: AVOID CONTACT WITH EYES AND SKIN. WEAR PROPER PROTECTIVE EQUIPMENT WHEN DEALING WITH RELEASE.

ENVIRONMENTAL PRECAUTIONS: CONTAIN SPILL TO AVOID RELEASE TO THE ENVIRONMENT. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

METHODS FOR CONTAINMENT AND CLEAN-UP: CAREFULLY SWEEP UP MATERIAL AND TRANSFER TO A CONTAINER FOR REUSE OR DISPOSAL. THOROUGHLY RINSE AREA WITH WATER.

7. HANDLING AND STORAGE

HANDLING: ALWAYS WEAR PROPER PROTECTIVE EQUIPMENT WHEN HANDLING. WASH THOROUGHLY AFTER HANDLING.

STORAGE: STORE IN A COOL, DRY PLACE AWAY FROM FLAMMABLE MATERIALS. KEEP OUT OF REACH OF CHILDREN. KEEP LID TIGHTLY CLOSED WHEN NOT IN USE.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THRESHOLD LIMIT VALUE (TLV): 2-BUTOXYETHANOL, 20 PPM; SODIUM NITRITE, 180 MG/KG

ENGINEERING CONTROLS: NONE REQUIRED UNDER NORMAL USE.

EYE / FACE PROTECTION: CHEMICAL SAFETY GLASSES.

SKIN PROTECTION: CHEMICAL RESISTANT GLOVES.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: SOLID.

APPEARANCE: WHITE POWDER.

ODOR: LIGHT SOLVENT SCENT.

BOILING POINT: NOT ESTABLISHED.

FREEZING POINT: NOT ESTABLISHED.

SPECIFIC GRAVITY: NOT ESTABLISHED.

pH (1%): 11.5-11.9

EVAPORATION RATE: NOT ESTABLISHED.

FLASH POINT: DOES NOT FLASH.

LOWER FLAMMABILITY/EXPLOSIVE LIMIT: NOT ESTABLISHED.

UPPER FLAMMABLE/EXPLOSIVE LIMIT: NOT ESTABLISHED.

AUTO-IGNITION TEMPERATURE: NOT ESTABLISHED.

VISCOSITY: NOT ESTABLISHED.

REALITIVE DENSITY: NOT ESTABLISHED.

SOLUBILITY: SOLUBLE.

VAPOR PRESSURE: NOT ESTABLISHED.

VAPOR DENSITY: NOT ESTABLISHED.

DECOMPOSITION TEMPERATURE: NOT ESTABLISHED.

PARTICAL COEFFICIENT: NOT ESTABLISHED.
N-OCTANOL/WATER

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE.

CONDITIONS TO AVOID: NONE KNOWN.

INCOMPATIBLE MATERIALS: ACIDS, AMMONIUM SALTS, AMINES, CYANIDES, AND REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND DIOXIDE FROM THERMAL DECOMPOSITION.

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11. TOXICOLOGICAL INFORMATION

EYE IRRITATION/CORROSION: MAY IRRITATE OR BURN EYES

EFFECTS OF SHORT-TERM EXPOSURE: DIRECT EYE CONTACT MAY CAUSE SEVERE IRRITATION.

INGESTION: SEVERE IRRITATION TO MOUTH, THROAT, STOMACH.

12. ECOLOGICAL IDENTIFICATION

ECOTOXICITY: NOT ESTABLISHED.

PERSISTENCE AND DEGRADABILITY: BIODEGRADABLE.

BIOACCUMULATION/ACCUMULATION NOT ESTABLISHED.

13. DISPOSAL CONDITIONS

MATERIALS ARE TO BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

14. TRANSPORTATION INFORMATION

GROUND SHIPPING INFORMATION:

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., DRY.

WATER SHIPPING INFORMATION:

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., DRY.

AIR SHIPPING INFORMATION:

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., DRY.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT) ALL COMPONENTS LISTED ON TSCA INVENTORY.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

313 REPORTABLE INGREDIENTS

GLYCOL ETHERS

CAS NUMBER:

CATEGORY N230

PERCENT:

3.0%

SODIUM NITRITE

7632-00-0

2.0%

STATE REGULATIONS: CALIFORNIA PROPOSITION 65 -THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS CURRENTLY LISTED.

INTERNATIONAL REGULATIONS: CLASS D2 IRRITANT UNDER CANADIAN WHMIS.

SECTION 15 NOTES: NONE.

16. OTHER INFORMATION

PHONE NUMBER: 417-866-8000

DATE OF PREPARATION: 5/1/2014

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