

**MATERIAL SAFETY DATA SHEET**  
**(ESSENTIALLY SIMILAR TO OSHA FORM 20, COMPLIES WITH 29CFR 1910:1200)**

**HAZARD RATING: HEALTH - 1, FIRE - 1, REACTIVITY - 0**  
MINIMAL - 0      SLIGHT - 1      MODERATE - 2      SERIOUS - 3      SEVERE - 4

**\*\*\*SECTION I: GENERAL INFORMATION\*\*\***

MANUFACTURED FOR: NOBLE CHEMICAL, DIVISION OF CLARK ASSOC.  
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LANCASTER, PA 17602  
TELEPHONE NUMBER: 888-256-6400  
DATE ISSUED/REVISED: MAY 2, 2002  
**EMERGENCY RESPONSE NUMBER: 800-255-3924 (CHEM-TEL)**

**FORMULA NO.:** C-227  
**PRODUCT NAME:** CITRA-KLEEN ALL PURPOSE CLEANER & DEGREASER  
**CHEMICAL FAMILY:** LIQUID CLEANER & DEGREASER

**HAZARDOUS MATERIAL DESCRIPTION**  
**(PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)**  
NONE

**\*\*\*SECTION II: HAZARDOUS INGREDIENTS\*\*\***  
**AS LISTED IN EPA 40CFR PARTS 261 & 116 AND/OR MASS. DEQE CMR 670.00**

CHEMICAL NAME	CAS NO.	% BY WEIGHT	HAZARD DATA
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CONTAINS NO INGREDIENT THAT IS LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY IARC, NTP, OR OSHA.

**\*\*\*SECTION III: PHYSICAL DATA\*\*\***

BOILING POINT/RANGE (F): 212  
SPECIFIC GRAVITY: 1.052 (WATER=1)  
% VOLATILE BY VOLUME: 85%  
EVAP. RATE (BUAC=1): COMP. TO WATER (SLOWER)  
WEIGHT/GALLON: 8.76# (WATER=8.33#)  
SOLUBILITY IN WATER: DISPERSIBLE (FORMS EMULSION)  
VAPOR PRESSURE (MM/HG): NA  
PHYSICAL STATE: CLEAR, THIN, LIGHT ORANGE LIQUID  
VAPOR DENSITY (AIR=1): COMP. TO WATER (HEAVIER)  
ODOR: CITRUS ORANGE  
pH: 12.1

**\*\*\*SECTION IV: FIRE AND EXPLOSION HAZARD DATA\*\*\***

FLASH POINT (METHOD USED): NONE  
FLAMMABLE LIMITS: NOT APPLICABLE  
FIRE EXTINGUISHING MEDIA: WATER FOG, FOAM, GAS (CO2/HALON), DRY CHEMICAL  
SPECIAL FIRE FIGHTING PROCEDURES: PROTECTIVE CLOTHING & NIOSH/MSHA PRESSURE, DEMAND, SELF-CONTAINED BREATHING APPARATUS. UNOPENED CONTAINERS SHOULD BE KEPT COOL WITH WATER SPRAY OR REMOVED FROM THE FIRE AREA IF POSSIBLE AND KEPT COOL.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: PRODUCT IS A COMBUSTIBLE LIQUID. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. THERMAN DECOMPOSITION OR BURNING MAY PRODUCE CARBON MONOXIDE.

**\*\*\*SECTION V: HEALTH HAZARD DATA\*\*\***

THRESHOLD LIMIT VALUE: NOT ESTABLISHED

PRIMARY ROUTES OF ENTRY: SKIN ABSORPTION, INHALATION

EFFECTS OF OVEREXPOSURE:

...ACUTE - CAN CAUSE SKIN AND EYE IRRITATION. DERMATITIS THROUGH DEFATTING OF SKIN. MAY CAUSE CONJUNCTIVITIS OF THE EYE. HARMFUL IF SWALLOWED.

...CHRONIC - PROLONGED EXCESSIVE INHALATION OF VAPORS CAN CAUSE EYE, NASAL, AND RESPIRATORY TRACT IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES:

...INHALATION - REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF STOPPED, GIVE ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

...EYES - IMMEDIATELY FLUSH THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, KEEPING LIDS APART. GET MEDICAL ATTENTION.

...SKIN - WASH WITH PLENTY OF SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. REMOVE CLOTHING IF CONTAMINATED.

...INGESTION - DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE LARGE QUANTITY OF WATER. GET IMMEDIATE MEDICAL ATTENTION FROM PHYSICIAN OR HOSPITAL.

**\*\*\*SECTION VI: REACTIVITY DATA\*\*\***

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: EXTREME HEAT, CONTACT WITH OPEN FLAME, HOT SURFACES, SPARKS, ETC.

MATERIALS TO AVOID: DO NOT MIX WITH OTHER CHEMICALS, INCLUDING STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY PRODUCE CARBON MONOXIDE UPON DECOMPOSITION AT HIGH TEMPERATURES.

**\*\*\*SECTION VII: SPILL OR LEAK PROCEDURES\*\*\***

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

... CONTAIN THE SPILL. WEAR EYE AND SKIN PROTECTION AND ENSURE ADEQUATE VENTILATION. ABSORB WITH FLOOR ABSORBENT, SAND, DIRT, ETC. PLACE IN CLOSED CONTAINER. RINSE AREA THOROUGHLY WITH WATER.

WASTE DISPOSAL: DISPOSE OF ACCORDING TO LOCAL REGULATIONS FOR HAZARDOUS WASTE.

**\*\*\*SECTION VIII: SPECIAL PROTECTION INFORMATION\*\*\***

RESPIRATORY PROTECTION: NONE REQUIRED IF ADEQUATE VENTILATION. IF HIGH CONCENTRATIONS, USE NIOSH/MSHA APPROVED RESPIRATOR FOR ORGANIC VAPOR. VENTILATION TYPE: LOCAL EXHAUST ADEQUATE.

PROTECTIVE GLOVES: SOLVENT RESISTANT GLOVES

EYE PROTECTION: SAFETY GLASSES, GOGGLES, OR FULL FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT: SOLVENT RESISTANT APRON, CLOTHING, BOOTS.

**\*\*\*SECTION IX: SPECIAL PRECAUTIONS\*\*\***

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE IN A COOL AREA. DO NOT GET ON SKIN, EYES, OR CLOTHING. KEEP CONTAINER TIGHTLY CLOSED. USE WITH ADEQUATE VENTILATION. IF SPILLED ON CLOTHING, REMOVE CLOTHING AND FLUSH OFF EXPOSED SKIN WITH SOAP AND WATER. AVOID BREATHING VAPORS. DO NOT TAKE INTERNALLY. USE PROPER PROTECTIVE EQUIPMENT.

OTHER PRECAUTIONS: AVOID CONTACT WITH OPEN FLAMES, HOT SURFACES, SPARKS, ETC. KEEP OUT OF THE REACH OF CHILDREN.