



MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: 03/09/00

This MSDS complies with OSHA's Hazard Communication Standard CFR 1910.1200 and OSHA Form 174.

N/A SIGNIFIES NON-APPLICABLE

IDENTITY AND SUPPLIERS INFORMATION

PRODUCT NAME: **ADENA 9889 AD9889** CHEMICAL FAMILY:
GENERIC NAME: FORMULA: PROPRIETARY
SUPPLIER'S NAME: ADENA TECHNOLOGIES PHONE NUMBER: (888) 247-2312
SUPPLIER'S ADDRESS: 101 Technology Lane EMERGENCY NO.: (800) 255-3924
Export, PA 15632
PROPER SHIPPING NAME: CONSUMER COMMODITY (ORM-D)

NFPA HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	RATING
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
MAX PERSONAL PROTECTION	- -

SECTION 1 - INGREDIENT IDENTIFICATION AND INFORMATION

CHEMICAL NAME	CARC.	CAS NO.	WT %	SARA III	PEL	TWA-TLV	STEL-TLV
Citric Acid	No	7-92-9	<45		Not Established	Not Established	

SECTION 2 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: 215°F (102°C)
VAPOR PRESSURE: Similar to water
VAPOR DENSITY: ≈1
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY @20°C: 1.223
pH RANGE: 3.5
EVAPORATION RATE (Water=1): < 1
VOLATILE RATE: 60%
PHYSICAL DESCRIPTION: Clear colorless liquid with nearly no odor.

SECTION 3 - FIRE/EXPLOSION HAZARD DATA

AUTO IGNITION TEMP: N/A
FLASH POINT: N/A
FLAMMABILITY LIMITS: N/A
EXTINGUISHER MEDIA: Not combustible
HAZARDOUS PRODUCTS OF COMBUSTION: N/A
EXPLOSIVE LIMITS: N/A

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: Stable
INCOMPATIBILITY: Strong oxidizers, strong alkalis.
CONDITIONS TO AVOID: N/A
HAZARDOUS DECOMPOSITION PRODUCTS: N/A
HAZARDOUS POLYMERIZATION: Will not occur

SECTION 5 - HEALTH HAZARD DATA AND FIRST AID

PRIMARY ROUTES OF ENTRY:
SKIN: Irritation upon contact.

EYES: Immediate irritation.

INHALATION: Not a likely route of exposure.

INGESTION: Possible irritation of esophageal linings.

FIRST AID PROCEDURES:

SKIN: Remove contaminated clothing and flush exposed skin with soap and water. If irritation persists or develops, get medical attention. Launder contaminated clothing before reuse.
EYES: Immediately flush with large amounts of water for 15 minutes and get medical attention.
INHALATION: Move to fresh air. Aid in breathing, if necessary, and get medical attention.
INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately. Never give anything by mouth to an unconscious person.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION: Respirator not required with most applications.
VENTILATION: Local exhaust is generally sufficient to minimize exposure.
PROTECTIVE CLOTHING: Neoprene gloves, apron, boots – as necessary to prevent skin contact.
EYE PROTECTION: Chemical goggles.
OTHER PRECAUTIONS: Safety shower and eyewash fountains should be easily accessible.

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Avoid skin contact. Neutralize with appropriate material and flush with water to sanitary sewer.
WASTE DISPOSAL METHODS: Dispose of in accordance with all applicable Federal, State, and Local regulations.
PRECAUTION IN STORAGE AND HANDLING: Empty containers may contain residuals. Thoroughly clean then offer for recycling, reuse, or disposal in accordance with governmental regulations.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without any warranty or guarantee of any kind.