

# SAFETY DATA SHEET



## SECTION 1 - IDENTIFICATION

**PRODUCT NAME:** ISOCYANURIC ACID  
**COMPANY:** UNITED MINERAL & CHEMICAL CORPORATION  
160 Chubb Ave, Ste. 206, Lyndhurst, NJ 07071  
Tel: 201-507-3300 Fax: 201-507-1506

**US D.O.T. / UN NAME:** NOT REGULATED FOR TRANSPORT  
e-mail: inquiry@umccorp.com

**RECOMMENDED USES:** CHEMICAL INTERMEDIATE, CHLORINE  
STABILIZER, OXIDIZING/REDUCING AGENTS,  
PROCESS REGULATORS, SOLVENTS  
**EMERGENCY TELEPHONE NO.:**  
USA – CHEMTREC: 1-800-424-9300  
OUTSIDE USA: +1 703-527-3887

## SECTION 2 – HAZARD IDENTIFICATION

**GHS HAZARD CLASSIFICATION:**  
NOT CLASSIFIED  
**GHS LABEL ELEMENTS:**  
SIGNAL WORD: NO SIGNAL WORD  
LABEL CODES / PICTOGRAMS: NO PICTOGRAMS  
HAZARD STATEMENTS: NONE UNDER GHS CLASSIFICATION

### PRECAUTIONARY STATEMENTS :

**PREVENTION :** NONE ASSIGNED UNDER GHS  
**RESPONSE :** NONE ASSIGNED UNDER GHS  
**STORAGE :** NONE ASSIGNED UNDER GHS  
**DISPOSAL :** NONE ASSIGNED UNDER GHS

**OTHER HAZARDS / U.S. - HAZARDS NOT OTHERWISE CLASSIFIED / UN GHS - OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:**  
AS NUISANCE DUST, MAY CAUSE MECHANICAL IRRITATION OF EYES, SKIN, & RESPIRATORY TRACT.  
USE GOOD INDUSTRIAL HYGIENE PRACTICES.

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| CHEMICAL COMPOSITION: | COMPONENTS:         | CAS NO.   | %         |
|-----------------------|---------------------|-----------|-----------|
|                       | ISOCYANURIC ACID    | 108-80-5  | 98.5 MIN. |
|                       | WATER (AS MOISTURE) | 7732-18-5 | ≤0.8      |

**SYNONYMS:** CYANURIC ACID; s-TRIAZINE -2,4,6-TRIOL; s-TRIAZINE -2,4,6(1H,3H,5H)-TRIONE; TRICYNIC ACID  
**CHEMICAL FAMILY:** ACIDS

## SECTION 4 – FIRST AID MEASURES

**FIRST AID/ RESPONSE**      **FIRST AID RESPONDERS SHOULD WEAR PERSONAL PROTECTIVE EQUIPMENT**

**SKIN :** IF ON SKIN: PROMPTLY WASH OFF WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ADVICE/ATTENTION IF IRRITATION OCCURS. WASH CONTAMINATED CLOTHING BEFORE REUSE.

**EYES :** IF IN EYES: DO NOT RUB EYES. RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. GET MEDICAL ADVICE/ATTENTION IF IRRITATION OCCURS.

**INHALATION :** IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. GET MEDICAL ADVISE / ATTENTION IF ANY ADVERSE SYMPTOMS OCCUR.

**INGESTION :** IF SWALLOWED: GET MEDICAL ATTENTION IF LARGE QUANTITY IS INGESTED OR IF YOU FEEL UNWELL.

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED**  
INHALATION OF DUST OR PROCESSING FUMES MAY CAUSE RESPIRATORY IRRITATION. DUST OR FINE PARTICULATE CONTACT WITH SKIN OR EYES MAY CAUSE MILD IRRITATION.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY**  
CALL A POISON CENTER/DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.

## SECTION 5 – FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA :** **WATER :** (X-AS SPRAY/FOG) **FOAM :** (X-ALCOHOL RESISTANT) **CO<sub>2</sub> :** (X) **DRY CHEMICAL:** (X)  
DO NOT USE HIGH PRESSURE WATER JET. PRODUCT IS NON-COMBUSTIBLE.

**SPECIFIC HAZARDS IN CASE OF FIRE :** EVACUATE AREA UNDER FIRE CONDITIONS. HIGH HEAT/ FIRE CONDITIONS CAN EMIT HIGHLY TOXIC, IRRITATING MISTS/FUMES UPON BURNING - CYANIC ACID [CN<sup>-</sup> FUMES] AND OXIDES OF NITROGEN AND CARBON.

**SPECIAL PROTECTIVE EQUIPMENT & PRECAUTION FOR FIRE FIGHTERS :** IN CASE OF FIRE INVOLVING THIS MATERIAL, DO NOT ENTER THE FIRE AREA WITHOUT FULL IMPERVIOUS PROTECTIVE GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS.

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**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

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**PERSONAL PRECAUTIONS:** VENTILATE CLOSED SPACES BEFORE ENTERING. WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). KEEP UNPROTECTED PERSONNEL OUT OF THE AREA. KEEP AWAY FROM HIGH HEAT AND ALL SOURCES OF IGNITION. AVOID GENERATING DUST.

**ENVIRONMENTAL PRECAUTIONS:** AVOID RELEASE TO SEWERS, WATERWAYS AND THE ENVIRONMENT. DISPOSE OF PROPERLY VIA LICENSED CHEMICAL WASTEHAULER.

**METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP:** SWEEP UP USING AN INERT SWEEPING COMPOUND, VACUUM (USING A HEPA FILTER SYSTEM) OR SCOOP INTO A CLEAN, DRY, PROPERLY LABELED CONTAINER AND SEAL. AVOID GENERATING DUST. USE DAMP PAPER TOWEL TO WIPE UP ANY REMAINING RESIDUE. PLACE USED PAPER TOWEL IN A VAPOR PROOF PLASTIC BAG FOR PROPER DISPOSAL. WASH ALL CONTAMINATED SURFACES WITH SOAP AND WATER.

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**SECTION 7 – HANDLING & STORAGE**

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**PRECAUTIONS FOR SAFE HANDLING:** AVOID BREATHING DUST. AVOID CONTACT WITH SKIN & EYES. WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). USE WITH ADEQUATE VENTILATION. AVOID GENERATING DUST. AVOID RELEASE TO THE SEWER SYSTEM. WASH THOROUGHLY AFTER USING AND BEFORE EATING, DRINKING OR SMOKING.

**NOTE:** ANY DUST THAT IS GENERATED IN PROCESSING MAY BE EXPLOSIVE IF MIXED WITH AIR IN CRITICAL PROPORTIONS AND IN THE PRESENCE OF A SOURCE OF IGNITION. EMPLOY GOOD HOUSEKEEPING TECHNIQUES TO CONTROL DUST BUILD-UP ON EQUIPMENT AND WORK AREA. PROPERLY GROUND ALL HANDLING / PROCESSING EQUIPMENT.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:** STORE IN A SEALED CONTAINER IN A COOL, DRY, WELL-VENTILATED AREA. PREVENT FROM PHYSICAL SHOCK/DAMAGE. KEEP AWAY FROM DIRECT HEAT AND SOURCES OF IGNITION.

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**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**CONTROL PARAMETERS:**

**EXPOSURE LIMITS: U.S. OSHA PEL :** NONE ESTABLISHED FOR PRODUCT; TREAT AS NUISANCE DUST, PARTICULATES NOT OTHERWISE REGULATED: 15 mg/m<sup>3</sup> TWA TOTAL DUST; 5 mg/m<sup>3</sup> TWA RESPIRABLE FRACTION  
**U.S. ACGIH TLV :** NONE ESTABLISHED FOR PRODUCT  
**APPROPRIATE ENGINEERING CONTROLS :** USE LOCAL / MECHANICAL EXHAUST TO MAINTAIN AIR CONCENTRATIONS BELOW OCCUPATIONAL EXPOSURE STANDARDS (SEE ABOVE)

**PERSONAL PROTECTIVE EQUIPMENT:**

**RESPIRATORY PROTECTION :** USE NIOSH APPROVED RESPIRATOR SUITABLE TO MEET PERMISSIBLE EXPOSURE LIMIT. SEE U.S. OSHA RESPIRATORY STANDARD (20 CFR 1910.134).

**HAND PROTECTION :** USE IMPERVIOUS CHEMICAL RESISTANT GLOVES (RUBBER, PVC)

**EYE PROTECTION :** SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS OR FULL FACE SHIELD; ACCESS TO AN EYEWASH FOUNTAIN

**OTHER PROTECTIVE EQUIPMENT :** LABCOAT; COVERALLS TO PROTECT SKIN; ACCESS TO A SAFETY DRENCH SHOWER

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**SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES**

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|   |                                |  |                                   |
|---|--------------------------------|--|-----------------------------------|
| <b>APPEARANCE :</b>                         | WHITE CRYSTALLINE POWDER/SOLID | <b>FLAMMABLE LIMITS :</b>                      | LEL:& UEL: (N/A)                  |
| <b>ODOR :</b>                               | NO ODOR                        | <b>VAPOR PRESSURE (mm Hg AT 25°C):</b>         | ESTIMATED: 4.41x10 <sup>-11</sup> |
| <b>ODOR THRESHOLD :</b>                     | N/A                            | <b>VAPOR DENSITY (AIR=1):</b>                  | N/A                               |
| <b>pH (1% IN WATER):</b>                    | 3-7                            | <b>RELATIVE DENSITY/SPECIFIC GRAVITY :</b>     | 1.7 - 2.5                         |
| <b>MELTING POINT / FREEZING POINT (°C):</b> | SUBLIMES AT >330 (626°F)       | <b>SOLUBILITY IN WATER (@25°C):</b>            | SLIGHT: ≤0.2 g/100ml              |
| <b>BOILING POINT (°C):</b>                  | DECOMPOSES                     | <b>PARTITION COEFFICIENT(n-OCTANOL/WATER):</b> | ESTIMATED Log Kow=1.95            |
| <b>FLASH POINT (°F):</b>                    | N/A                            | <b>AUTO IGNITION TEMP. (°C):</b>               | N/A                               |
| <b>EVAPORATION RATE :</b>                   | ESSENTIALLY NIL                | <b>DECOMPOSITION TEMP.(°C):</b>                | > 300°C (572°F)                   |
| <b>FLAMMABILITY :</b>                       | NO DATA AVAILABLE              | <b>VISCOSITY :</b>                             | N/A                               |

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**SECTION 10 – STABILITY AND REACTIVITY**

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**REACTIVITY :** VIOLENT REACTION WITH ETHANOL; REACTS WITH CLORINE TO FORM A SPONTANEOUSLY EXPLOSIVE PRODUCT

**CHEMICAL STABILITY :** STABLE WHEN STORED IN SEALED PACKAGE UNDER RECOMMENDED STORAGE CONDITIONS

**POSSIBILITY OF HAZARDOUS REACTIONS :** HAZARDOUS POLYMERIZATION WILL NOT OCCUR

**CONDITIONS TO AVOID :** EXTREME HEAT (>300°C); CONTACT WITH STRONG OXIDIZING AGENTS; AVOID DUST FORMATION / DUST IN VICINITY OF IGNITION SOURCES, ELECTRICAL OR SPARK GENERATING EQUIPMENT

**INCOMPATIBLE MATERIALS :** STRONG OXIDIZING AGENTS

**HAZARDOUS DECOMPOSITION PRODUCTS :** DECOMPOSES AT APPROX. 320-350°C (608-662°F) PRODUCING HIGHLY TOXIC FUMES INCLUDING CYANIC ACID [CN] AND OXIDES OF NITROGEN AND CARBON.

**SECTION 11 – TOXICOLOGICAL INFORMATION****POTENTIAL HEALTH EFFECTS:**

**ROUTES OF EXPOSURE :** SKIN, EYES, INHALATION, INGESTION

**SKIN :** AS DUST, MAY CAUSE SLIGHT IRRITATION TO THE SKIN.

**EYES :** AS DUST, MAY CAUSE SLIGHT/MILD IRRITATION TO THE EYES.

**INHALATION :** INHALATION OF EXCESSIVE DUST OR PROCESSING FUMES MAY CAUSE RESPIRATORY IRRITATION / COUGH.

**INGESTION :** NO KNOWN EFFECTS; MAY CAUSE GASTRIC IRRITATION / DISTRESS

**CHRONIC:** EARLY LITERATURE CITES A LONG TERM STUDIES SHOWED A POTENTIAL TUMORIGENIC EFFECT ON THE LIVER, SKIN / APPENDAGES (ORAL TDLo RAT: 55 g/kg FOR 82 WEEKS – INTERMITTENT) AND BLOOD, LUNGS, THORAX, RESPIRATORY SYSTEM (SUBCUTANEOUS TDLo RAT: 27 g/kg FOR 2 YEARS – INTERMITTENT). SEE RTECS NO. XZ1800000. CYANURIC ACID IS NOT A CLASSIFIED CARCINOGEN.

**ACUTE TOXICITY :** ORAL LD<sub>50</sub> >5,000 mg/kg (RAT); DERMAL LD<sub>50</sub>: >5,000 mg/kg (RABBIT)

**SKIN CORROSION / IRRITATION :** SLIGHT IRRITATION POSSIBLE; BELOW GHS CLASSIFICATION – BASED ON TESTING OF SIMILAR PRODUCTS

**SERIOUS EYE DAMAGE / IRRITATION :** 500 mg/24h- MILD/SLIGHT IRRITATION, BELOW GHS CLASSIFICATION – BASED ON TESTING OF SIMILAR PRODUCTS

**RESPIRATORY OR SKIN SENSITIZATION :** NO TEST DATA AVAILABLE

**GERM CELL MUTAGENICITY :** NO TEST DATA AVAILABLE – EXPECTED TO BE NEGATIVE BASED ON TESTING OF SIMILAR PRODUCTS

**CARCINOGENICITY :** U.S. LISTED CARCINOGEN: NONE (X) OSHA ( ) NTP ( ) IARC ( ) OTHER ( )

**REPRODUCTIVE TOXICITY :** NO TEST DATA AVAILABLE; LITERATURE CITES THAT ISOCYANURIC ACID INDICATED NO ALTERATION IN REPRODUCTIVE PARAMETERS

**SPECIFIC TARGET ORGAN TOXICITY :** ACUTE/SINGLE EXPOSURE: NO TEST DATA ; REPEATED EXPOSURE: NOAEL=150mg/kg/day, LOAEL: 600 mg/kg/day – LITERATURE. DOES NOT MEET GHS CLASSIFICATION CRITERIA

**ASPIRATION HAZARD :** NO DATA AVAILABLE

**INTERACTIVE EFFECTS:** NO INFORMATION AVAILABLE

**SECTION 12 – ECOLOGICAL INFORMATION**

**ECOTOXICITY :** AVOID RELEASE TO THE ENVIRONMENT AS THIS PRODUCT HAS NOT BEEN FULLY TESTED

**TOXICITY - AQUATIC :** LC<sub>50</sub> (FATHEAD MINNOW): >2,100 mg/L-96h BASED ON TESTING OF SIMILAR SUBSTANCE

**TOXICITY TO DAPHNIA :** EC<sub>50</sub> (DAPHNIA MAGNA): 65.9 mg/L/21d – BASED ON TESTING OF SIMILAR SUBSTANCE

**TOXICITY - TERRESTIAL :** NO DATA AVAILABLE; MAY BE TOXIC TO SELECT PLANTS DUE TO ACIDIC PROPERTIES

**PERSISTANCE & DEGRADABILITY:** BIODEGRADES READILY UNDER A WIDE VARIETY OF NATURAL CONDITIONS

**BIOACCUMULATIVE POTENTIAL :** BCF VALUES OF 0.1 AND 0.5 WERE DERIVED FOR CONCENTRATIONS OF 10 AND 1 mg/L RESPECTIVELY. THIS SUGGESTS BIOCONCENTRATION IN AQUATIC ORGANISMS IS LOW.

**MOBILITY IN SOIL :** EXPECTED TO HAVE HIGH MOBILITY IN SOIL; ESTIMATED K<sub>oc</sub> = 58

**OTHER ADVERSE EFFECTS :** NO DATA AVAILABLE

**SECTION 13 – DISPOSAL CONSIDERATIONS****DISPOSAL METHODS:**

DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, INTERNATIONAL REGULATIONS. INCINERATE AT A HIGH TEMPERATURE (>2000°F) CHEMICAL INCINERATION FACILITY OR DISPOSE OF IN A LANDFILL THAT COMPLIES WITH LOCAL, STATE AND FEDERAL REGULATIONS.

**SECTION 14 – TRANSPORT INFORMATION**

**BY ROAD OR RAIL - U.S. D.O.T. REGULATED:** YES ( ) NO (X) **RQ:** (N/A)

IF REGULATED, UN PROPER SHIPPING NAME: HAZARD CLASS: ( )

UN IDENTIFICATION NO.: ( ) PACKING GROUP: ( ) LABEL REQUIRED: ( )

U.S. MARINE POLLUTANT: YES ( ) NO (X) SEVERE U.S. MARINE POLLUTANT: YES ( ) NO (X)

EMERGENCY RESPONSE GUIDE NO.: ( )

INLAND B/L:

**BY SEA - IMDG REGULATED:** YES ( ) NO (X) **STOWAGE CATEGORY:** N/A

**BY AIR - IATA REGULATED:** YES ( ) NO (X) **PKG INSTRUCTION NO.:** N/A

**SPECIAL PRECAUTIONS:** READ SDS BEFORE HANDLING

**SECTION 15 – REGULATORY INFORMATION**

**U.S. TSCA:** WE CERTIFY THAT ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE TOXIC SUBSTANCES CONTROL ACT.

**U.S. SARA TITLE III, SECT. 313 :** LISTED ( ) NOT LISTED (X)

**U.S. RCRA HAZARDOUS WASTE :** NO (X) YES ( ) **RCRA #:** ( )

**U.S. CERCLA :** NO (X) YES ( ) **RQ (N/A)**

**U.S. CALIFORNIA PROPOSITION 65 LISTED :** YES ( ) NO (X)

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**SECTION 16 – OTHER INFORMATION**

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**REVISION DATE:** DECEMBER 13, 2023    **PREPARED BY:** EHSA COORDINATOR / UNITED MINERAL & CHEMICAL CORP.

**ABBREVIATIONS / ACRONYMS:**    **N/A**=NOT APPLICABLE; **LEL**=LOWER EXPLOSION LIMIT; **UEL**=UPPER EXPLOSION LIMIT; **PEL**=PERMISSIBLE EXPOSURE LIMIT; **STEL**=SHORT TERM EXPOSURE LIMIT; **TLV**=THRESHOLD LIMIT VALUE; **TWA**=TIME WEIGHTED AVERAGE OVER 8 HOUR WORKDAY; **LD<sub>50</sub>** OR **LC<sub>50</sub>**=LETHAL DOSE OR LETHAL CONCENTRATION THAT KILLS 50% OF DOSED GROUP; **mg**=MILLIGRAM; **g**=GRAM; **kg**=KILOGRAM; **PPM**=PARTS PER MILLION; **m**=METER; **LOAEL**=LOWEST OBSERVED ADVERSE EFFECT LEVEL; **C.I.**=COLOUR INDEX

IN ACCORDANCE WITH GOOD PRACTICES OF PERSONAL HYGIENE, HANDLE WITH DUE CARE AND AVOID ANY UNNECESSARY CONTACT WITH THIS PRODUCT. USE RECOMMENDED PERSONAL PROTECTION WHEN HANDLING (SEE SECTION 8).

THIS INFORMATION IS BEING SUPPLIED TO YOU UNDER OSHA "RIGHT TO KNOW" REGULATION 29 CFR 1910.1200 AND IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATION. THE INFORMATION IS BELIEVED TO BE TRUE AND ACCURATE. NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THIS DATA, THE HAZARD CONNECTED WITH USE OF THE MATERIAL, OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, IS MADE. UNITED MINERAL & CHEMICAL CORPORATION AND ITS SUPPLIERS ASSUME NO RESPONSIBILITY FOR DAMAGE OR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

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