

# *Chem-Impex International Inc.*

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## SAFETY DATA SHEET

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #:	24521
NAME:	Triethylenediamine
SYNONYMS:	1,4-Diazabicyclo[2.2.2]octane TED DABCO
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

### SECTION 2. HAZARDS IDENTIFICATION

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**CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**

FLAMMABLE SOLIDS (CATEGORY 1), H228  
ACUTE TOXICITY, ORAL (CATEGORY 4), H302  
SKIN IRRITATION (CATEGORY 2), H315  
SERIOUS EYE DAMAGE (CATEGORY 1), H318

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS  
PICTOGRAM**



SIGNAL WORD DANGER

**HAZARD STATEMENT(S)**

H228 FLAMMABLE SOLID.  
H302 HARMFUL IF SWALLOWED.  
H315 CAUSES SKIN IRRITATION.  
H318 CAUSES SERIOUS EYE DAMAGE.

**PRECAUTIONARY STATEMENT(S)**

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING.  
P240 GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.  
P241 USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING/ EQUIPMENT.  
P264 WASH SKIN THOROUGHLY AFTER HANDLING.  
P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.  
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.  
P301 + P312 + P330 IF SWALLOWED: CALL A POISON CENTER/ DOCTOR IF YOU FEEL UNWELL. RINSE MOUTH.  
P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.  
P305 + P351 + P338 + P310 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A POISON CENTER/ DOCTOR.  
P332 + P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ ATTENTION.  
P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE.  
P370 + P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM FOR EXTINCTION.  
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

**HAZARDS NOT OTHERWISE CLASSIFIED (HNO) OR NOT COVERED BY GHS** NONE

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

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MF:  $C_6H_{12}N_2$   
MW: 112.18  
CAS-NO. 280-57-9  
PURITY:  $\geq 99\%$  (GC)

**HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
<b>1,4-DIAZABICYCLOOCTANE</b>		
	FLAM. SOL. 1; ACUTE TOX. 4; SKIN IRRIT. 2; EYE DAM. 1; H228, H302, H315, H318	$\leq 100\%$

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

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**SECTION 4. FIRST-AID MEASURES**

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**DESCRIPTION OF FIRST AID MEASURES**

**GENERAL ADVICE** CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT OF DANGEROUS AREA.

**IF INHALED** IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.

**IN CASE OF SKIN CONTACT** IN CASE OF SKIN CONTACT: TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER.

**IN CASE OF EYE CONTACT** AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF WATER. IMMEDIATELY CALL IN OPHTHALMOLOGIST. REMOVE CONTACT LENSES.

**IF SWALLOWED** AFTER SWALLOWING: IMMEDIATELY MAKE VICTIM DRINK WATER (TWO GLASSES AT MOST). CONSULT A PHYSICIAN.

**MOST IMPORTANT SYMPTOMS AND** THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11

**EFFECTS, BOTH ACUTE  
AND DELAYED**

**INDICATION OF ANY  
IMMEDIATE MEDICAL  
ATTENTION AND  
SPECIAL TREATMENT  
NEEDED**

NO DATA AVAILABLE

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**SECTION 5. FIRE AND EXPLOSION DATA**

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**EXTINGUISHING MEDIA**

**SUITABLE  
EXTINGUISHING MEDIA**

SUITABLE EXTINGUISHING MEDIA  
WATER FOAM CARBON DIOXIDE (CO<sub>2</sub>) DRY POWDER

UNSUITABLE EXTINGUISHING MEDIA  
FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF  
EXTINGUISHING AGENTS ARE GIVEN.

**SPECIAL HAZARDS  
ARISING FROM THE  
SUBSTANCE OR MIXTURE**

NATURE OF DECOMPOSITION PRODUCTS NOT  
KNOWN.  
COMBUSTIBLE.  
FIRE MAY CAUSE EVOLUTION OF:  
AMMONIA, NITROGEN OXIDES  
VAPORS ARE HEAVIER THAN AIR AND MAY SPREAD  
ALONG FLOORS.  
FORMS EXPLOSIVE MIXTURES WITH AIR ON INTENSE  
HEATING.  
DEVELOPMENT OF HAZARDOUS COMBUSTION GASES  
OR VAPOURS POSSIBLE IN THE EVENT OF FIRE.

**ADVICE FOR  
FIREFIGHTERS**

STAY IN DANGER AREA ONLY WITH SELF-CONTAINED  
BREATHING APPARATUS. PREVENT SKIN CONTACT BY  
KEEPING A SAFE DISTANCE OR BY WEARING  
SUITABLE PROTECTIVE CLOTHING.

**FURTHER INFORMATION**

REMOVE CONTAINER FROM DANGER ZONE AND  
COOL WITH WATER. SUPPRESS (KNOCK DOWN)  
GASES/VAPORS/MISTS WITH A WATER SPRAY JET.  
PREVENT FIRE EXTINGUISHING WATER FROM  
CONTAMINATING SURFACE WATER OR THE GROUND  
WATER SYSTEM.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL  
PRECAUTIONS,  
PROTECTIVE  
EQUIPMENT AND  
EMERGENCY  
PROCEDURES**

ADVICE FOR NON-EMERGENCY PERSONNEL: AVOID INHALATION OF DUSTS. AVOID SUBSTANCE CONTACT. ENSURE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. EVACUATE THE DANGER AREA, OBSERVE EMERGENCY PROCEDURES, CONSULT AN EXPERT.  
FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL  
PRECAUTIONS**

DO NOT LET PRODUCT ENTER DRAINS. RISK OF EXPLOSION.

**METHODS AND  
MATERIALS FOR  
CONTAINMENT AND  
CLEANING UP**

COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS. OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE SECTIONS 7 AND 10). TAKE UP DRY. DISPOSE OF PROPERLY. CLEAN UP AFFECTED AREA. AVOID GENERATION OF DUSTS.

**REFERENCE TO OTHER  
SECTIONS**

FOR DISPOSAL SEE SECTION 13.

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**SECTION 7. HANDLING AND STORAGE**

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**PRECAUTIONS FOR SAFE  
HANDLING**

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION  
KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND SOURCES OF IGNITION. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.

HYGIENE MEASURES  
IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.  
FOR PRECAUTIONS SEE SECTION 2.2.

**CONDITIONS FOR SAFE  
STORAGE, INCLUDING  
ANY INCOMPATIBILITIES**

TIGHTLY CLOSED. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION.  
RECOMMENDED STORAGE TEMPERATURE SEE PRODUCT LABEL.

Store at 0 - 8 °C

STORAGE CLASS (TRGS 510): 4.1B: FLAMMABLE SOLID HAZARDOUS MATERIALS

**SPECIFIC END USE(S)**

APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

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

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**CONTROL PARAMETERS****INGREDIENTS WITH WORKPLACE CONTROL PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

**EXPOSURE CONTROLS**

<b>APPROPRIATE ENGINEERING CONTROLS</b>	IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.
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**PERSONAL PROTECTIVE EQUIPMENT**

<b>EYE/FACE PROTECTION</b>	USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU). TIGHTLY FITTING SAFETY GOGGLES
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<b>SKIN PROTECTION</b>	THIS RECOMMENDATION APPLIES ONLY TO THE PRODUCT STATED IN THE SAFETY DATA SHEET, SUPPLIED BY US AND FOR THE DESIGNATED USE. WHEN DISSOLVING IN OR MIXING WITH OTHER SUBSTANCES AND UNDER CONDITIONS DEVIATING FROM THOSE STATED IN EN 16523-1 PLEASE CONTACT THE SUPPLIER OF CE-APPROVED GLOVES.
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**FULL CONTACT**

MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:KCL 741 DERMATRIL L

THIS RECOMMENDATION APPLIES ONLY TO THE  
PRODUCT STATED IN THE SAFETY DATA SHEET,  
SUPPLIED BY US AND FOR THE DESIGNATED USE.  
WHEN DISSOLVING IN OR MIXING WITH OTHER  
SUBSTANCES AND UNDER CONDITIONS DEVIATING  
FROM THOSE STATED IN EN 16523-1 PLEASE  
CONTACT THE SUPPLIER OF CE-APPROVED GLOVES.

**SPLASH CONTACT**

MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:KCL 741 DERMATRIL L

<b>BODY PROTECTION</b>	COMPLETE SUIT PROTECTING AGAINST CHEMICALS, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.
<b>RESPIRATORY PROTECTION</b>	RECOMMENDED FILTER TYPE: FILTER TYPE P2 THE ENTREPRENEUR HAS TO ENSURE THAT MAINTENANCE, CLEANING AND TESTING OF RESPIRATORY PROTECTIVE DEVICES ARE CARRIED OUT ACCORDING TO THE INSTRUCTIONS OF THE PRODUCER. THESE MEASURES HAVE TO BE PROPERLY DOCUMENTED. REQUIRED WHEN DUSTS ARE GENERATED. OUR RECOMMENDATIONS ON FILTERING RESPIRATORY PROTECTION ARE BASED ON THE FOLLOWING STANDARDS: DIN EN 143, DIN 14387 AND OTHER ACCOMPANYING STANDARDS RELATING TO THE USED RESPIRATORY PROTECTION SYSTEM.
<b>CONTROL OF ENVIRONMENTAL EXPOSURE</b>	DO NOT LET PRODUCT ENTER DRAINS. RISK OF EXPLOSION.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES</b>	
APPEARANCE	White crystalline powder
ODOUR	AMMONIA ODOR
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	AT 20 °C ALKALINE, AQUEOUS SOLUTION
MELTING POINT/FREEZING POINT	
INITIAL BOILING POINT AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	THE SUBSTANCE OR MIXTURE IS A FLAMMABLE SOLID WITH THE CATEGORY 1. - REGULATION (EC) NO. 440/2008, ANNEX, A.10
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	0.43 HPA AT 23 °C - OECD TEST GUIDELINE 104
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	
WATER SOLUBILITY	610 G/L AT 25 °C - SOLUBLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	LOG POW: -0.49 AT 20 °C (68 °F) - (CALCULATED) - (LIT.), BIOACCUMULATION IS NOT EXPECTED.

AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

**OTHER SAFETY INFORMATION**

BULK DENSITY	800 KG/M3
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**SECTION 10. STABILITY AND REACTIVITY**

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<b>REACTIVITY</b>	FORMS EXPLOSIVE MIXTURES WITH AIR ON INTENSE HEATING. A RANGE FROM APPROX. 15 KELVIN BELOW THE FLASH POINT IS TO BE RATED AS CRITICAL. THE FOLLOWING APPLIES IN GENERAL TO FLAMMABLE ORGANIC SUBSTANCES AND MIXTURES: IN CORRESPONDINGLY FINE DISTRIBUTION, WHEN WHIRLED UP A DUST EXPLOSION POTENTIAL MAY GENERALLY BE ASSUMED.
<b>CHEMICAL STABILITY</b>	THE PRODUCT IS CHEMICALLY STABLE UNDER STANDARD AMBIENT CONDITIONS (ROOM TEMPERATURE).
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	NO DATA AVAILABLE
<b>CONDITIONS TO AVOID</b>	STRONG HEATING.
<b>INCOMPATIBLE MATERIALS</b>	STRONG OXIDIZING AGENTS
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	IN THE EVENT OF FIRE: SEE SECTION 5

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**SECTION 11. TOXICOLOGICAL INFORMATION**

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**INFORMATION ON TOXICOLOGICAL EFFECTS**



<b>ACUTE TOXICITY</b>	<p>LD50 ORAL - RAT - 700 MG/KG  REMARKS: (ECHA)  SYMPTOMS: POSSIBLE DAMAGES:, MUCOSAL IRRITATIONS</p> <p>INHALATION: NO DATA AVAILABLE</p> <p>LD50 DERMAL - RABBIT - MALE AND FEMALE - &gt; 2,000 MG/KG  REMARKS: (ECHA)</p> <p>NO DATA AVAILABLE</p>
<b>SKIN CORROSION/IRRITATION</b>	<p>SKIN - RABBIT  RESULT: IRRITATIONS  REMARKS: (ECHA)</p>
<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	<p>EYES - RABBIT  RESULT: CAUSES SERIOUS EYE DAMAGE.  (OECD TEST GUIDELINE 405)</p>
<b>RESPIRATORY OR SKIN SENSITISATION</b>	<p>MAXIMIZATION TEST - GUINEA PIG  RESULT: NEGATIVE  (OECD TEST GUIDELINE 406)</p>
<b>GERM CELL MUTAGENICITY</b>	<p>TEST TYPE: AMES TEST  TEST SYSTEM: SALMONELLA TYPHIMURIUM  METABOLIC ACTIVATION: METABOLIC ACTIVATION  METHOD: OECD TEST GUIDELINE 471  RESULT: NEGATIVE</p> <p>TEST TYPE: CHROMOSOME ABERRATION TEST  SPECIES: MOUSE  CELL TYPE: BONE MARROW</p> <p>METHOD: OECD TEST GUIDELINE 474  RESULT: NEGATIVE</p>
<b>CARCINOGENICITY</b>	
IARC:	NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.
NTP:	NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.
OSHA:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
<b>REPRODUCTIVE TOXICITY</b>	NO DATA AVAILABLE

<b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>	NO DATA AVAILABLE
<b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b>	NO DATA AVAILABLE
<b>ASPIRATION HAZARD</b>	NO DATA AVAILABLE
<b>ADDITIONAL INFORMATION</b>	<p>TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.</p> <p>AFTER ABSORPTION:  DIZZINESS  HEADACHE</p> <p>DAMAGE TO:  KIDNEY</p> <p>OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED.  HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.</p>

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## **SECTION 12. ECOLOGICAL INFORMATION**

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<b>TOXICITY</b>	
TOXICITY TO FISH	<p>STATIC TEST LC50 - CYPRINUS CARPIO (CARP) - &gt; 100 MG/L - 96 H  (OECD TEST GUIDELINE 203)</p>
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES	<p>STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) - &gt; 100 MG/L - 48 H  (OECD TEST GUIDELINE 202)</p>
TOXICITY TO ALGAE	<p>STATIC TEST EC50 - PSEUDOKIRCHNERIELLA SUBCAPITATA (GREEN ALGAE) 110 MG/L - 72 H  (OECD TEST GUIDELINE 201)</p>
	<p>STATIC TEST NOEC - PSEUDOKIRCHNERIELLA SUBCAPITATA (GREEN ALGAE) 46 MG/L - 72 H  (OECD TEST GUIDELINE 201)</p>
TOXICITY TO BACTERIA	<p>STATIC TEST EC50 - PSEUDOMONAS PUTIDA - 355.6 MG/L - 17 H  REMARKS: (ECHA)</p>

### **PERSISTENCE AND DEGRADABILITY**

BIODEGRADABILITY                    AEROBIC - EXPOSURE TIME 28 D  
RESULT: 7 % - NOT READILY BIODEGRADABLE.  
(OECD TEST GUIDELINE 301B)

**BIOACCUMULATIVE POTENTIAL**

BIOACCUMULATION                    CYPRINUS CARPIO (CARP) - 42 D  
- 1 MG/L(1,4-DIAZABICYCLO[2.2.2]OCTANE)

BIOCONCENTRATION FACTOR (BCF): < 1.3  
(OECD TEST GUIDELINE 305C)

**MOBILITY IN SOIL**                    NO DATA AVAILABLE

**RESULTS OF PBT AND  
VPVB ASSESSMENT**                    PBT/VPVB ASSESSMENT NOT AVAILABLE AS  
CHEMICAL SAFETY ASSESSMENT NOT  
REQUIRED/NOT CONDUCTED

**OTHER ADVERSE EFFECTS**            NO DATA AVAILABLE

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**SECTION 13.      DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

**PRODUCT**                                WASTE MATERIAL MUST BE DISPOSED OF IN  
ACCORDANCE WITH THE NATIONAL AND LOCAL  
REGULATIONS. LEAVE CHEMICALS IN ORIGINAL  
CONTAINERS. NO MIXING WITH OTHER WASTE.  
HANDLE UNCLEARED CONTAINERS LIKE THE  
PRODUCT ITSELF. SEE [WWW.RETROLOGISTIK.COM](http://WWW.RETROLOGISTIK.COM) FOR  
PROCESSES REGARDING THE RETURN OF CHEMICALS  
AND CONTAINERS, OR CONTACT US THERE IF YOU  
HAVE FURTHER QUESTIONS.

**CONTAMINATED  
PACKAGING**                                DISPOSE OF AS UNUSED PRODUCT.

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**SECTION 14.      TRANSPORT INFORMATION**

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**DOT (US)**

PROPER SHIPPING NAME:                FLAMMABLE SOLIDS, ORGANIC, N.O.S.(1,4-  
Diazabicyclooctane)

UN NUMBER:                                1325

CLASS:                                        4.1

PACKING GROUP:                            II

Reportable Quantity (RQ):

POISON INHALATION                        NO

HAZARD:

**IMDG**

PROPER SHIPPING NAME: FLAMMABLE SOLIDS, ORGANIC, N.O.S.(1,4-Diazabicyclooctane)  
UN NUMBER: 1325  
CLASS: 4.1  
PACKING GROUP: II  
EMS-NO: F-A, S-G  
MARINE POLLUTANT: NO

**IATA**

PROPER SHIPPING NAME: FLAMMABLE SOLIDS, ORGANIC, N.O.S.(1,4-Diazabicyclooctane)  
UN NUMBER: 1325  
CLASS: 4.1  
PACKING GROUP: II

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**SECTION 15. REGULATORY INFORMATION**

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**SARA 302 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 302 EHS TPQ.

**SARA 313 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS**

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

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**SECTION 16. OTHER INFORMATION**

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**FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.**

H228 FLAMMABLE SOLID.  
H302 HARMFUL IF SWALLOWED.  
H315 CAUSES SKIN IRRITATION.  
H318 CAUSES SERIOUS EYE DAMAGE.

**MSDS LEGEND**

MW: MOLECULAR WEIGHT  
MF: MOLECULAR FORMULA  
VOC: VOLATILE ORGANIC COMPOUNDS  
ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS  
CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)  
TLV: THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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