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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 38685

NAME: 3,3'-Diaminodipropylamine

SYNONYMS: Dipropylenetriamine

3,3'-Iminodipropylamine

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

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

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

ACUTE TOXICITY, ORAL (CATEGORY 4), H302 ACUTE TOXICITY, INHALATION (CATEGORY 1), H330 ACUTE TOXICITY, DERMAL (CATEGORY 3), H311 SKIN CORROSION (CATEGORY 1A), H314 SERIOUS EYE DAMAGE (CATEGORY 1), H318

RESPIRATORY SENSITIZATION (CATEGORY 1), H334

SKIN SENSITISATION (SUB-CATEGORY 1A), H317

GERM CELL MUTAGENICITY (CATEGORY 2), H341

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 2), THYMUS,

H373

SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 3), H402

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)

H302	HARMFUL IF SWALLOWED.
H311	TOXIC IN CONTACT WITH SKIN.
H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H317	MAY CAUSE AN ALLERGIC SKIN REACTION.
H330	FATAL IF INHALED.
H334	MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING
	DIFFICULTIES IF INHALED.
H341	SUSPECTED OF CAUSING GENETIC DEFECTS.
H373	MAY CAUSE DAMAGE TO ORGANS (THYMUS) THROUGH
	PROLONGED OR REPEATED EXPOSURE.
H402	HARMFUL TO AOUATIC LIFE.

PRECAUTIONARY STAT	EMENT(S)	
P201	OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.	
P202	DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE	
	BEEN READ AND UNDERSTOOD.	
P260	DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.	
P264	WASH SKIN THOROUGHLY AFTER HANDLING.	
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.	
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.	
P272	CONTAMINATED WORK CLOTHING MUST NOT BE ALLOWED	
	OUT OF THE WORKPLACE.	
P273	AVOID RELEASE TO THE ENVIRONMENT.	
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE	
	PROTECTION/ FACE PROTECTION.	
P284	WEAR RESPIRATORY PROTECTION.	
P301 + P312 + P330	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU FEEL	
	UNWELL. RINSE MOUTH.	
P301 + P330 + P331	IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING.	
P303 + P361 + P353	IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL	
	CONTAMINATED CLOTHING. RINSE SKIN WITH	
	WATER/SHOWER.	
P304 + P340 + P310	IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP	
	COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A	

POISON CENTER/DOCTOR.

P305 + P351 + P338 + IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL

P310 MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY

TO DO. CONTINUE RINSING. IMMEDIATELY CALL A POISON

CENTER/DOCTOR.

P308 + P313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/

ATTENTION.

P333 + P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/

ATTENTION.

P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE

REUSE.

P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER

TIGHTLY CLOSED.

P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE

DISPOSAL PLANT.

HAZARDS NOT NONE

OTHERWISE

CLASSIFIED (HNOC) OR NOT COVERED BY

GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $C_6H_{17}N_3$

MW: 131.22

CAS-NO. 56-18-8

PURITY: $\geq 99\%$ (Assay by titration, GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
3,3'-Diaminodipropylamin	e	
	ACUTE TOX. 4; ACUTE TOX. 1; ACUTE TOX. 3; SKIN CORR. 1A; EYE DAM. 1; SKIN SENS. 1A; MUTA. 2; STOT RE 2; AQUATIC	<= 100 %
	ACUTE 3; H302, H330, H311, H314, H318, H317, H341, H373, H402	
TRIMETHYLENEDIAMI	INE	
	FLAM. LIQ. 3; MET. CORR. 1; ACUTE TOX. 4; ACUTE TOX. 2; SKIN CORR. 1B; EYE DAM. 1; RESP. SENS. 1; SKIN SENS. 1; AQUATIC ACUTE 3; H226, H290,	>= 0.1 - < 1 %

H302, H310, H314, H318, H334,
H317, H402

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

SECTION 4. FIRST-AID MEASURES

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

TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE VICTIM IMMEDIATELY TO HOSPITAL.

CONSULT A PHYSICIAN.

IN CASE OF EYE

CONTACT

RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

LEAST 15 MINUTES AND CONSULT A

PHYSICIAN.CONTINUE RINSING EYES DURING TRANSPORT

TO HOSPITAL.

IF SWALLOWED DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY

MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH

WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT

SYMPTOMS AND

EFFECTS, BOTH ACUTE

AND DELAYED

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

AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL

TREATMENT NEEDED

NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY **SUITABLE**

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS CARBON OXIDES, NITROGEN OXIDES (NOX)

ARISING FROM THE COMBUSTIBLE. SUBSTANCE OR MIXTURE

WEAR SELF-CONTAINED BREATHING APPARATUS FOR ADVICE FOR

FIREFIGHTERS FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

WEAR RESPIRATORY PROTECTION. AVOID BREATHING PERSONAL

PRECAUTIONS, VAPOURS, MIST OR GAS. ENSURE ADEQUATE

PROTECTIVE EQUIPMENT VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS.

FOR PERSONAL PROTECTION SEE SECTION 8. AND EMERGENCY

ENVIRONMENTAL PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO

PRECAUTIONS SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE

INTO THE ENVIRONMENT MUST BE AVOIDED.

METHODS AND SOAK UP WITH INERT ABSORBENT MATERIAL AND

DISPOSE OF AS HAZARDOUS WASTE. KEEP IN SUITABLE, MATERIALS FOR

CONTAINMENT AND CLOSED CONTAINERS FOR DISPOSAL. **CLEANING UP**

FOR DISPOSAL SEE SECTION 13. REFERENCE TO OTHER

SECTIONS

PROCEDURES

SECTION 7. HANDLING AND STORAGE

ANY INCOMPATIBILITIES

PRECAUTIONS FOR SAFE AVOID CONTACT WITH SKIN AND EYES. AVOID

HANDLING INHALATION OF VAPOUR OR MIST.

FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-STORAGE, INCLUDING

VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO

PREVENT LEAKAGE.

Store at RT

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH

ENGINEERING CONTROLS HANDS BEFORE BREAKS AND IMMEDIATELY AFTER

HANDLING THE PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION TIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-INCH

MINIMUM). USE EQUIPMENT FOR EYE PROTECTION

TESTED AND APPROVED UNDER APPROPRIATE

GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN

166(EU).

SKIN PROTECTION

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

FULL CONTACT

MATERIAL: BUTYL-RUBBER

MINIMUM LAYER THICKNESS: 0.3 MM BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED:BUTOJECT (KCL 897, SIZE M)

SPLASH CONTACT

MATERIAL: BUTYL-RUBBER

MINIMUM LAYER THICKNESS: 0.3 MM BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED:BUTOJECT (KCL 897, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

BODY PROTECTION

COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY PROTECTION

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.
DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Colorless clear liquid

ODOUR AMINE-LIKE

ODOUR THRESHOLD NO DATA AVAILABLE
PH 12 AT 100 G/L AT 20 C
MELTING -13 to -15 °C (Lit.)

POINT/FREEZING POINT

INITIAL BOILING POINT 114 - 116 °C / 9 mmHg (Lit.)

AND BOILING RANGE

FLASH POINT 117 °C

EVAPORATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE 0.05 HPA AT 20 C

1.15 HPA AT 50 C

VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY 0.930 (Lit.) WATER SOLUBILITY SOLUBLE

PARTITION COEFFICIENT: LOG POW: -1.25 AT 25 C

N- OCTANOL/WATER

AUTO-IGNITION THE SUBSTANCE OR MIXTURE IS NOT CLASSIFIED AS SELF

TEMPERATURE HEATING.

DECOMPOSITION 265 C, 120 KJ/KG

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NOT EXPLOSIVE OXIDIZING PROPERTIES NO DATA AVAILABLE

OTHER SAFETY INFORMATION

DISSOCIATION CONSTANT 10.7 AT 30 C

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF NO DATA AVAILABLE

HAZARDOUS REACTIONS

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES, NITROGEN OXIDES

(NOX)

OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - 738 MG/KG

LC50 INHALATION - RAT - 4 H - 0.03 MG/L

LD50 DERMAL - RAT - > 200 - < 400 MG/KG

NO DATA AVAILABLE

SKIN SKIN RABBIT

RESULT: CAUSES SEVERE BURNS. **CORROSION/IRRITATION**

(OECD TEST GUIDELINE 404)

SERIOUS EYE EYES RABBIT

DAMAGE/EYE IRRITATION RESULT: CORROSIVE TO EYES

RESPIRATORY OR SKIN

IN VIVO ASSAY MOUSE

SENSITISATION THE PRODUCT IS A SKIN SENSITISER, SUB-CATEGORY 1A.

(OECD TEST GUIDELINE 429)

GERM CELL RESULT: NOT MUTAGENIC IN AMES TEST

MUTAGENICITY RESULT: POSITIVE RESULTS WERE OBTAINED IN SOME IN

VIVO TESTS.

CARCINOGENICITY

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS

GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS

PROBABLE, POSSIBLE OR CONFIRMED HUMAN

CARCINOGEN BY IARC.

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS $NTP \cdot$

GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A

KNOWN OR ANTICIPATED CARCINOGEN BY NTP.

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS OSHA:

GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF

REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY DID NOT SHOW TERATOGENIC EFFECTS IN ANIMAL

EXPERIMENTS.

ANIMAL TESTING DID NOT SHOW ANY EFFECTS ON

FERTILITY.

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

EXPOSURE

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

TOXICITY - REPEATED

EXPOSURE

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. - THYMUS

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: JL9450000

MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES, AND SKIN., COUGH, SHORTNESS OF

BREATH, HEADACHE, NAUSEA

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO FISH TOXICITY TO DAPHNIA AND

OTHER AQUATIC INVERTEBRATES

TOXICITY TO ALGAE

LC50 - LEUCISCUS IDUS (GOLDEN ORFE) - 230 MG/L - 96 H EC50 - DAPHNIA MAGNA (WATER FLEA) - 37.35 MG/L - 48 H

EC50 - DESMODESMUS SUBSPICATUS (GREEN ALGAE) -

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY RESULT: 80 - 90 % - READILY BIODEGRADABLE

599.2 MG/L - 72 H

BIOACCUMULATIVE

POTENTIAL

NO DATA AVAILABLE

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 AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED

IN THE EVENT OF UNPROFESSIONAL HANDLING OR

DISPOSAL.

HARMFUL TO AQUATIC LIFE.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO

A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN

AFTERBURNER AND SCRUBBER.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: 3,3"-IMINODIPROPYLAMINE

UN NUMBER: 2269 CLASS: 8 PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: 3,3"-IMINODIPROPYLAMINE

UN NUMBER: 2269
CLASS: 8
PACKING GROUP: III
EMS-NO: F-A, S-B

IATA

PROPER SHIPPING NAME: 3,3"-IMINODIPROPYLAMINE

UN NUMBER: 2269 CLASS: 8 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE

REPORTING REQUIREMENTS OF SARA TITLE III, SECTION

302.

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.

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

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

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

3,3'-Diaminodipropylamine 56-18-8 03/01/2007

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

3,3'-Diaminodipropylamine 56-18-8 03/01/2007

SECTION 16. OTHER INFORMATION

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

H302 HARMFUL IF SWALLOWED.

H311 TOXIC IN CONTACT WITH SKIN.

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

H317 MAY CAUSE AN ALLERGIC SKIN REACTION.

H330 FATAL IF INHALED.

H334 MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR

BREATHING DIFFICULTIES IF INHALED.

H341 SUSPECTED OF CAUSING GENETIC DEFECTS.

H373 MAY CAUSE DAMAGE TO ORGANS (THYMUS) THROUGH

PROLONGED OR REPEATED EXPOSURE.

H402 HARMFUL TO AQUATIC LIFE.

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL

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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