

# *Chem-Impex International Inc.*

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## SAFETY DATA SHEET

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #: 36584

NAME: *N*-Hydroxymaleimide

SYNONYMS:

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)**  
SKIN CORROSION (CATEGORY 1B), H314  
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)**

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

H318 CAUSES SERIOUS EYE DAMAGE.

**PRECAUTIONARY STATEMENT(S)**

P260 DO NOT BREATHE DUST OR MIST.

P264 WASH SKIN THOROUGHLY AFTER HANDLING.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.

P301 + P330 + P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING.

P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ 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 + 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.

P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.

P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

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

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

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MF: C<sub>4</sub>H<sub>3</sub>NO<sub>3</sub>  
MW: 113.07  
CAS-NO. 4814-74-8  
PURITY: ≥ 97% (HPLC)

| COMPONENT | CLASSIFICATION | CONCENTRATION |
|-----------|----------------|---------------|
|-----------|----------------|---------------|

|                           |  |          |
|---------------------------|--|----------|
| <b>N-Hydroxymaleimide</b> |  |          |
|                           | SKIN CORR. 1B; EYE DAM. 1;<br>H314, H318 | <= 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**

|   |  |
|---|--|
| <b>GENERAL ADVICE</b>   | CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.                                   |
| <b>IF INHALED</b>   | IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.                            |
| <b>IN CASE OF SKIN CONTACT</b>  | TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.                         |
| <b>IN CASE OF EYE CONTACT</b>   | RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN. CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL. |
| <b>IF SWALLOWED</b>   | DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.                |
| <b>MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED</b>                | THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.                       |
| <b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED</b> | NO DATA AVAILABLE  |

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## **SECTION 5. FIRE AND EXPLOSION DATA**

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### **EXTINGUISHING MEDIA**

|  |   |
|--|---|
| <b>SUITABLE<br/>EXTINGUISHING MEDIA</b>                              | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY<br>CHEMICAL OR CARBON DIOXIDE. |
| <b>SPECIAL HAZARDS<br/>ARISING FROM THE<br/>SUBSTANCE OR MIXTURE</b> | CARBON OXIDES, NITROGEN OXIDES (NOX)  |
| <b>ADVICE FOR<br/>FIREFIGHTERS</b>                                   | WEAR SELF CONTAINED BREATHING APPARATUS FOR<br>FIRE FIGHTING IF NECESSARY.  |
| <b>FURTHER INFORMATION</b>   | NO DATA AVAILABLE   |

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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|  |   |
|--|---|
| <b>PERSONAL<br/>PRECAUTIONS,<br/>PROTECTIVE<br/>EQUIPMENT AND<br/>EMERGENCY<br/>PROCEDURES</b> | USE PERSONAL PROTECTIVE EQUIPMENT. AVOID<br>DUST FORMATION. AVOID BREATHING VAPOURS, MIST<br>OR GAS. ENSURE ADEQUATE VENTILATION.<br>EVACUATE PERSONNEL TO SAFE AREAS. AVOID<br>BREATHING DUST.<br><br>FOR PERSONAL PROTECTION SEE SECTION 8. |
| <b>ENVIRONMENTAL<br/>PRECAUTIONS</b>   | DO NOT LET PRODUCT ENTER DRAINS.  |
| <b>METHODS AND<br/>MATERIALS FOR<br/>CONTAINMENT AND<br/>CLEANING UP</b>                       | PICK UP AND ARRANGE DISPOSAL WITHOUT<br>CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN<br>SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.  |
| <b>REFERENCE TO OTHER<br/>SECTIONS</b>   | FOR DISPOSAL SEE SECTION 13.  |

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## **SECTION 7. HANDLING AND STORAGE**

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|   |  |
|---|--|
| <b>PRECAUTIONS FOR SAFE<br/>HANDLING</b>          | AVOID FORMATION OF DUST AND AEROSOLS.FURTHER<br>PROCESSING OF SOLID MATERIALS MAY RESULT IN<br>THE FORMATION OF COMBUSTIBLE DUSTS. THE<br>POTENTIAL FOR COMBUSTIBLE DUST FORMATION<br>SHOULD BE TAKEN INTO CONSIDERATION BEFORE<br>ADDITIONAL PROCESSING OCCURS.<br>PROVIDE APPROPRIATE EXHAUST VENTILATION AT<br>PLACES WHERE DUST IS FORMED.<br>FOR PRECAUTIONS SEE SECTION 2.2. |
| <b>CONDITIONS FOR SAFE<br/>STORAGE, INCLUDING</b> | KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND<br>WELL-VENTILATED PLACE.   |

**ANY INCOMPATIBILITIES** STORE UNDER INERT GAS. MOISTURE SENSITIVE. AIR AND MOISTURE SENSITIVE.

Store at RT, under inert gas

**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**

#### **COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

### **EXPOSURE CONTROLS**

#### **APPROPRIATE ENGINEERING CONTROLS**

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

### **PERSONAL PROTECTIVE EQUIPMENT**

#### **EYE/FACE PROTECTION**

FACE SHIELD AND SAFETY GLASSES 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: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

**SPLASH CONTACT**

MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:DERMATRIL (KCL 740, 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 PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) 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**

DO NOT LET PRODUCT ENTER DRAINS.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

|  |                                       |
|--|---------------------------------------|
| APPEARANCE   | White to off-white crystalline powder |
| ODOUR  | NO DATA AVAILABLE                     |
| ODOUR THRESHOLD                                    | NO DATA AVAILABLE                     |
| PH   | NO DATA AVAILABLE                     |
| MELTING  | 130 - 133 °C (dec.)                   |
| POINT/FREEZING POINT                               |                                       |
| INITIAL BOILING POINT                              |                                       |
| AND BOILING RANGE                                  |                                       |
| FLASH POINT  |                                       |
| EVAPORATION RATE                                   | NO DATA AVAILABLE                     |
| FLAMMABILITY (SOLID,<br>GAS)                       | NO DATA AVAILABLE                     |
| UPPER/LOWER<br>FLAMMABILITY OR<br>EXPLOSIVE LIMITS | NO DATA AVAILABLE                     |
| VAPOUR PRESSURE                                    | NO DATA AVAILABLE                     |
| VAPOUR DENSITY                                     | NO DATA AVAILABLE                     |
| RELATIVE DENSITY                                   |                                       |
| WATER SOLUBILITY                                   | NO DATA AVAILABLE                     |
| PARTITION COEFFICIENT:<br>N- OCTANOL/WATER         | NO DATA AVAILABLE                     |
| AUTO-IGNITION<br>TEMPERATURE                       | NO DATA AVAILABLE                     |
| DECOMPOSITION<br>TEMPERATURE                       | NO DATA AVAILABLE                     |
| VISCOSITY  | NO DATA AVAILABLE                     |
| EXPLOSIVE PROPERTIES                               | NO DATA AVAILABLE                     |
| OXIDIZING PROPERTIES                               | NO DATA AVAILABLE                     |
| <b>OTHER SAFETY<br/>INFORMATION</b>                | NO DATA AVAILABLE                     |

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**SECTION 10. STABILITY AND REACTIVITY**

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|   |   |
|---|---|
| <b>REACTIVITY</b>                                 | NO DATA AVAILABLE                               |
| <b>CHEMICAL STABILITY</b>                         | STABLE UNDER RECOMMENDED STORAGE<br>CONDITIONS. |
| <b>POSSIBILITY OF<br/>HAZARDOUS<br/>REACTIONS</b> | NO DATA AVAILABLE                               |
| <b>CONDITIONS TO AVOID</b>                        | AIR SENSITIVE.                                  |

|   |  |
|---|--|
| <b>INCOMPATIBLE MATERIALS</b>           | STRONG OXIDIZING AGENTS, STRONG ACIDS, ACID CHLORIDES, ACID ANHYDRIDES   |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b> | HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES, NITROGEN OXIDES (NOX)<br>OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE<br>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>                    | NO DATA AVAILABLE<br><br>INHALATION: NO DATA AVAILABLE<br><br>DERMAL: NO DATA AVAILABLE<br><br>NO DATA AVAILABLE  |
| <b>SKIN CORROSION/IRRITATION</b>         | NO DATA AVAILABLE   |
| <b>SERIOUS EYE DAMAGE/EYE IRRITATION</b> | NO DATA AVAILABLE   |
| <b>RESPIRATORY OR SKIN SENSITISATION</b> | NO DATA AVAILABLE   |
| <b>GERM CELL MUTAGENICITY</b>            | NO DATA AVAILABLE   |
| <b>CARCINOGENICITY</b>                   |   |
| 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. |
| ACGIH:                                   | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH.            |
| NTP:                                     | NO COMPONENT 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>                             | RTECS: NOT AVAILABLE<br><br>COUGH, SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING, TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. |

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**SECTION 12. ECOLOGICAL INFORMATION**

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|   |  |
|---|--|
| <b>TOXICITY</b>                           | NO DATA AVAILABLE  |
| <b>PERSISTENCE AND DEGRADABILITY</b>      | NO DATA AVAILABLE  |
| <b>BIOACCUMULATIVE POTENTIAL</b>          | NO DATA AVAILABLE  |
| <b>MOBILITY IN SOIL</b>                   | NO DATA AVAILABLE  |
| <b>RESULTS OF PBT AND VPVB ASSESSMENT</b> | PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED |
| <b>OTHER ADVERSE EFFECTS</b>              | NO DATA AVAILABLE  |

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

|                               |  |
|-------------------------------|--|
| <b>PRODUCT</b>                | 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. |
| <b>CONTAMINATED PACKAGING</b> | DISPOSE OF AS UNUSED PRODUCT.  |

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**SECTION 14. TRANSPORT INFORMATION**

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**DOT (US)**

|                           |  |
|---------------------------|--|
| PROPER SHIPPING NAME:     | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (1-HYDROXY-1H-PYRROLE-2,5- DIONE) |
| UN NUMBER:                | 3261   |
| CLASS:                    | 8  |
| PACKING GROUP:            | III  |
| REPORTABLE QUANTITY (RQ): |  |
| POISON INHALATION HAZARD: | NO   |

**IMDG**

|                       |  |
|-----------------------|--|
| PROPER SHIPPING NAME: | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (1-HYDROXY-1H-PYRROLE-2,5- DIONE) |
| UN NUMBER:            | 3261   |
| CLASS:                | 8  |
| PACKING GROUP:        | III  |
| EMS-NO:               | F-A, S-B   |

**IATA**

|                       |  |
|-----------------------|--|
| PROPER SHIPPING NAME: | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (1-HYDROXY-1H-PYRROLE-2,5- DIONE) |
| UN NUMBER:            | 3261   |
| CLASS:                | 8  |
| PACKING GROUP:        | III  |

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**SECTION 15. REGULATORY INFORMATION**

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|                            |   |
|----------------------------|---|
| <b>SARA 302 COMPONENTS</b> | 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

**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 |
|--------------------|-----------|---------------|
| N-Hydroxymaleimide | 4814-74-8 |               |

**NEW JERSEY RIGHT TO KNOW COMPONENTS**

|                    | CAS-NO.   | REVISION DATE |
|--------------------|-----------|---------------|
| N-Hydroxymaleimide | 4814-74-8 |               |

**CALIFORNIA PROP. 65 COMPONENTS**

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

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**SECTION 16. OTHER INFORMATION**

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

|      |  |
|------|--|
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. |
| 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)                            |

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