

# ***Chem-Impex International Inc.***

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825 Dillon Drive  
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## **SAFETY DATA SHEET**

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### **SECTION 1. CHEMICAL IDENTIFICATION**

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|                                 |   |
|---------------------------------|---|
| CATALOG #:                      | 30261   |
| NAME:                           | Barium bromide dihydrate                            |
| SYNONYMS:                       |   |
| 24 HOUR EMERGENCY<br>TELEPHONE: | (800) 535-5053(USA)<br>352-323-3500 (INTERNATIONAL) |
| TO REQUEST AN MSDS:             | (800) 869-9290                                      |
| CUSTOMER<br>SERVICE:            | (630) 766-2112                                      |

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### **SECTION 2. HAZARDS IDENTIFICATION**

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#### **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 4), H332

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

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



SIGNAL WORD                      WARNING

HAZARD STATEMENT(S)  
H302 + H332                      HARMFUL IF SWALLOWED OR IF INHALED

PRECAUTIONARY STATEMENT(S)  
P261                      AVOID BREATHING 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.  
P301 + P312              IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/  
                                 PHYSICIAN IF YOU FEEL UNWELL.  
P304 + P340              IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT  
                                 REST IN A POSITION COMFORTABLE FOR BREATHING.  
P312                      CALL A POISON CENTER OR DOCTOR/ PHYSICIAN IF YOU  
                                 FEEL UNWELL.  
P330                      RINSE MOUTH.  
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:                              BaBr<sub>2</sub>·2H<sub>2</sub>O  
  
MW:                              333.17  
  
CAS-NO.                      7791-28-8  
  
PURITY:                      ≥ 99%

**HAZARDOUS COMPONENTS**

| COMPONENT                       | CLASSIFICATION | CONCENTRATION |
|---------------------------------|----------------|---------------|
| <b>Barium bromide dihydrate</b> |                |               |
|                                 | -              | -             |

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>   | REMOVE TO FRESH AIR. DO NOT USE MOUTH-TO-MOUTH METHOD IF VICTIM INGESTED OR INHALED THE SUBSTANCE; GIVE ARTIFICIAL RESPIRATION WITH THE AID OF A POCKET MASK EQUIPPED WITH A ONE-WAY VALVE OR OTHER PROPER RESPIRATORY MEDICAL DEVICE. IMMEDIATE MEDICAL ATTENTION IS REQUIRED. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. |
| <b>IN CASE OF SKIN CONTACT</b>  | WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.   |
| <b>IN CASE OF EYE CONTACT</b>   | RINSE IMMEDIATELY WITH PLENTY OF WATER, ALSO UNDER THE EYELIDS, FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.  |
| <b>IF SWALLOWED</b>   | DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.   |
| <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 EXTINGUISHING MEDIA</b> | SUBSTANCE IS NONFLAMMABLE; USE AGENT MOST APPROPRIATE TO EXTINGUISH SURROUNDING FIRE. |
|-------------------------------------|---|

|  |  |
|--|--|
| <b>SPECIAL HAZARDS<br/>ARISING FROM THE<br/>SUBSTANCE OR MIXTURE</b> | NON-COMBUSTIBLE, SUBSTANCE ITSELF DOES NOT BURN BUT MAY DECOMPOSE UPON HEATING TO PRODUCE CORROSIVE AND/OR TOXIC FUMES. KEEP PRODUCT AND EMPTY CONTAINER AWAY FROM HEAT AND SOURCES OF IGNITION. |
| <b>ADVICE FOR<br/>FIREFIGHTERS</b>                                   | WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.   |
| <b>FURTHER INFORMATION</b>   | HAZARDOUS COMBUSTION PRODUCTS<br>HYDROGEN HALIDES.   |

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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 AS REQUIRED. EVACUATE PERSONNEL TO SAFE AREAS. ENSURE ADEQUATE VENTILATION. AVOID DUST FORMATION. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.<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>                       | SWEEP UP AND SHOVEL INTO SUITABLE CONTAINERS FOR DISPOSAL. AVOID DUST FORMATION.   |
| <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>                                    | USE ONLY UNDER A CHEMICAL FUME HOOD. WEAR PERSONAL PROTECTIVE EQUIPMENT/FACE PROTECTION. ENSURE ADEQUATE VENTILATION. AVOID DUST FORMATION. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. DO NOT BREATHE (DUST, VAPOR, MIST, GAS). DO NOT INGEST. IF SWALLOWED THEN SEEK IMMEDIATE MEDICAL ASSISTANCE. |
| <b>CONDITIONS FOR SAFE<br/>STORAGE, INCLUDING<br/>ANY INCOMPATIBILITIES</b> | KEEP CONTAINER TIGHTLY CLOSED. KEEP IN A DRY, COOL AND WELL-VENTILATED PLACE. REFER PRODUCT SPECIFICATION AND/OR PRODUCT LABEL FOR SPECIFIC STORAGE TEMPERATURE REQUIREMENT. PROTECT FROM MOISTURE.   |

Store at RT

**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**

| COMPONENT                | CAS-NO.   | VALUE | CONTROL PARAMETERS | BASIS                              |
|--------------------------|-----------|-------|--------------------|------------------------------------|
| Barium bromide dihydrate | 7791-28-8 | TWA   | 0.5 MG/M3          | ACGIH THRESHOLD LIMIT VALUES (TLV) |
|                          |           | TWA   | 0.5 MG/M3          | PERMISSIBLE EXPOSURE LIMITS (OSHA) |
|                          |           | IDLH  | 50 MG/M3           | NIOSH IDLH                         |
|                          |           | TWA   | 0.5 MG/M3          | NIOSH IDLH                         |

**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**

SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO EN166 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.

**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**

FOR NUISANCE EXPOSURES USE TYPE P95 (US) OR TYPE P1 (EU EN 143) PARTICLE RESPIRATOR.FOR HIGHER LEVEL PROTECTION USE TYPE OV/AG/P99 (US) OR TYPE ABEK-P2 (EU EN 143) RESPIRATOR CARTRIDGES. 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 crystalline powder |
| ODOUR  | NO DATA AVAILABLE        |
| ODOUR THRESHOLD  | NO DATA AVAILABLE        |
| PH   | NO DATA AVAILABLE        |
| MELTING<br>POINT/FREEZING POINT<br>INITIAL BOILING POINT<br>AND BOILING RANGE<br>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   | 3.58                     |
| 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        |

**OTHER SAFETY INFORMATION**

|                  |       |
|------------------|-------|
| SPECIFIC GRAVITY | 3.580 |
|------------------|-------|

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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 CONDITIONS.<br>HYGROSCOPIC                                 |
| <b>POSSIBILITY OF HAZARDOUS REACTIONS</b> | NO DATA AVAILABLE   |
| <b>CONDITIONS TO AVOID</b>                | AVOID DUST FORMATION. INCOMPATIBLE PRODUCTS.<br>EXCESS HEAT. EXPOSURE TO MOIST AIR OR WATER |
| <b>INCOMPATIBLE MATERIALS</b>             | ACIDS, OXIDIZING AGENT  |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b>   | HYDROGEN HALIDES<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. |
| 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 IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.             |
| <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>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>      | SOLUBLE IN WATER PERSISTENCE IS UNLIKELY BASED ON INFORMATION AVAILABLE. |
| <b>BIOACCUMULATIVE POTENTIAL</b>          | NO DATA AVAILABLE  |
| <b>MOBILITY IN SOIL</b>                   | WILL LIKELY BE MOBILE IN THE ENVIRONMENT DUE TO ITS WATER SOLUBILITY.    |
| <b>RESULTS OF PBT AND VPVB ASSESSMENT</b> | NO DATA AVAILABLE  |
| <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: | BARIUM COMPOUNDS, N.O.S. (BARIUM BROMIDE) |
| UN NUMBER:            | 1564                                      |
| CLASS:                | 6.1                                       |
| PACKING GROUP:        | III                                       |

**IMDG**

|                       |   |
|-----------------------|---|
| PROPER SHIPPING NAME: | BARIUM COMPOUNDS, N.O.S. (BARIUM BROMIDE) |
| UN NUMBER:            | 1564                                      |
| CLASS:                | 6.1                                       |
| PACKING GROUP:        | III                                       |

**IATA**

|                       |   |
|-----------------------|---|
| PROPER SHIPPING NAME: | BARIUM COMPOUNDS, N.O.S. (BARIUM BROMIDE) |
| UN NUMBER:            | 1564                                      |
| CLASS:                | 6.1                                       |
| PACKING GROUP:        | III                                       |

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**SECTION 15. REGULATORY INFORMATION**

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**SARA 302 COMPONENTS** NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

**SARA 313 COMPONENTS**

|  |  |               |
|--|--|---------------|
|  | CAS-<br>NO.  | REVISION DATE |
| Barium bromide dihydrate                     | 7791-28-8  |               |
| <b>SARA 311/312 HAZARDS</b>                  | ACUTE HEALTH HAZARD  |               |
| <b>PENNSYLVANIA RIGHT TO KNOW COMPONENTS</b> |  |               |
|  | CAS-NO.  | REVISION DATE |
| Barium bromide dihydrate                     | 7791-28-8  |               |
| <b>NEW JERSEY RIGHT TO KNOW COMPONENTS</b>   |  |               |
|  | CAS-NO.  | REVISION DATE |
| Barium bromide dihydrate                     | 7791-28-8  |               |
| <b>CALIFORNIA PROP. 65 COMPONENTS</b>        | 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.**  
H302 + H332 HARMFUL IF SWALLOWED OR IF INHALED

### 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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VERSION: 3.2.

REVISION DATE: 07/01/2020