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|----------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Tel: (630) 766-2112</b>                                           | <b>Fax: (630) 766-2218</b>                                         |
| E-mail: <a href="mailto:sales@chemimpex.com">sales@chemimpex.com</a> | Web site: <a href="http://www.chemimpex.com">www.chemimpex.com</a> |
| <b>Shipping and Correspondence:</b>                                  | <b>Manufacturing site:</b>                                         |
| 935 Dillon Drive                                                     | 825 Dillon Drive                                                   |
| Wood Dale, IL 60191 USA                                              | Wood Dale, IL 60191 USA                                            |

**Fax: (630) 766-2218**

Web site: [www.chemimpex.com](http://www.chemimpex.com)

**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191 USA

## CHEMICAL IDENTIFICATION

NAME: Z-Pip(Boc)-OH

**SYNONYMS:** Z-4-amino-1-Boc-piperidine-4-carboxylic acid

24 HOUR EMERGENCY TELEPHONE: (800) 535-5053(USA)  
352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

288154-16-5

CAS #: 288154-16-5

MF:  $\text{C}_{19}\text{H}_{26}\text{N}_2\text{O}_6$ 

MW: 378.43

PURITY:

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### SECTION 3. HAZARDS IDENTIFICATION

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NOT AVAILABLE.

#### **POTENTIAL HEALTH EFFECTS**

THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN INVESTIGATED. USE APPROPRIATE PROCEDURES TO PREVENT OPPORTUNITIES FOR DIRECT CONTACT WITH THE SKIN OR EYES AND TO PREVENT INHALATION.

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### SECTION 4. FIRST-AID MEASURES

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EYES: NOT AVAILABLE.

SKIN: NOT AVAILABLE.

INHALATION: NOT AVAILABLE.

INGESTION: DO NOT INDUCE VOMITING. IF CONSCIOUS AND ALERT, RINSE MOUTH AND DRINK 2-4 CUPFULS OF MILK OR WATER.

NOTES FOR PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

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### SECTION 5. FIRE FIGHTING MEASURES

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FLASH POINT: NOT AVAILABLE

|                              |               |
|------------------------------|---------------|
| AUTOIGNITION<br>TEMPERATURE: | NOT AVAILABLE |
|------------------------------|---------------|

|                                      |                      |
|--------------------------------------|----------------------|
| FLAMMABLE LIMITS IN AIR, BY % VOLUME |                      |
|                                      | UPPER: NOT AVAILABLE |
|                                      | LOWER: NOT AVAILABLE |

|                         |                |
|-------------------------|----------------|
| EXTINGUISHING<br>MEDIA: | NOT AVAILABLE. |
|-------------------------|----------------|

|                         |                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL<br>INFORMATION: | AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING<br>APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH<br>(APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR. |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

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USE PROPER PERSONAL PROTECTIVE EQUIPMENT AS INDICATED IN SECTION 8.

|                   |                                                                 |
|-------------------|-----------------------------------------------------------------|
| SPILLS AND LEAKS: | SWEEP UP, THEN PLACE INTO A SUITABLE CONTAINER FOR<br>DISPOSAL. |
|-------------------|-----------------------------------------------------------------|

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## SECTION 7. HANDLING AND STORAGE

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|          |                |
|----------|----------------|
| HANDLING | NOT AVAILABLE. |
|----------|----------------|

|         |                   |
|---------|-------------------|
| STORAGE | KEEP COOL AND DRY |
|---------|-------------------|

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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|             |                                                   |
|-------------|---------------------------------------------------|
| ENGINEERING | USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION |
|-------------|---------------------------------------------------|

|                    |                                                                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONTROLS:          | TO KEEP AIRBORNE CONCENTRATIONS BELOW THE PERMISSIBLE EXPOSURE LIMITS.                                                                                   |
| EYES:              | WEAR SAFETY GLASSES AND CHEMICAL GOGGLES IF SPLASHING IS POSSIBLE.                                                                                       |
| SKIN AND CLOTHING: | WEAR APPROPRIATE PROTECTIVE GLOVES AND CLOTHING TO PREVENT SKIN EXPOSURE.<br>WEAR APPROPRIATE PROTECTIVE CLOTHING TO MINIMIZE CONTACT WITH SKIN.         |
| RESPIRATORS:       | WEAR A NIOSH/MSHA OR EUROPEAN STANDARD EN 149 APPROVED FULL-FACEPIECE AIRLINE RESPIRATOR IN THE POSITIVE PRESSURE MODE WITH EMERGENCY ESCAPE PROVISIONS. |

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE:

pH: NOT AVAILABLE

VAPOR PRESSURE: NEGLIGIBLE.

VISCOSITY: NOT AVAILABLE

BOILING POINT:

FREEZING / MELTING  
POINT

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## SECTION 10. STABILITY AND REACTIVITY

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|                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| CHEMICAL STABILITY:                   | STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.          |
| CONDITIONS TO AVOID                   | INCOMPATIBLE MATERIALS.                                  |
| INCOMPATIBILITY WITH OTHER MATERIALS: | OXIDIZING AGENTS, REDUCING AGENTS, BASES, ALKALI METALS. |
| HAZARDOUS DECOMPOSITION PRODUCTS:     | CARBON MONOXIDE, CARBON DIOXIDE.                         |
| HAZARDOUS POLYMERIZATION:             | HAS NOT BEEN REPORTED.                                   |

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## SECTION 11. TOXICOLOGICAL INFORMATION

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RTECS#:

CAS# 288154-16-5

LD50/LC50:

CAS# 288154-16-5 :  
NOT AVAILABLE.

CARCINOGENICITY:

CAS# 288154-16-5 : NOT LISTED BY ACGIH, IARC, NIOSH, NTP, OR OSHA. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

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SECTION 12. ECOLOGICAL INFORMATION

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DATA NOT YET AVAILABLE.

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SECTION 13. DISPOSAL CONSIDERATIONS

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DISPOSE OF IN A MANNER CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

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SECTION 14. TRANSPORT INFORMATION

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NO INFORMATION AVAILABLE.

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SECTION 15. REGULATORY INFORMATION

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**U.S. FEDERAL REGULATIONS:**

**TSCA:**

CAS# 288154-16-5 IS LISTED ON THE TSCA INVENTORY.

**EUROPEAN/INTERNATIONAL REGULATIONS**

**EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES**

**HAZARD SYMBOLS:** NOT AVAILABLE.

**RISK PHRASES:**

**SAFETY PHRASES:**

S 24/25 AVOID CONTACT WITH SKIN AND EYES.

**WGK (WATER DANGER/PROTECTION)**

CAS# 288154-16-5 : NO INFORMATION AVAILABLE.

## **UNITED KINGDOM OCCUPATIONAL EXPOSURE LIMITS**

## **UNITED KINGDOM MAXIMUM EXPOSURE LIMITS**

### **CANADA - DSL/NDSL**

CAS# 288154-16-5 IS LISTED ON CANADA'S DSL LIST.

### **CANADIAN INGREDIENT DISCLOSURE LIST**

CAS# 288154-16-5 : IS NOT LISTED ON CANADA'S INGREDIENT DISCLOSURE LIST.

### **EXPOSURE LIMITS**

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## **SECTION 16. OTHER INFORMATION**

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### **MSDS LEGEND:**

|        |                                                              |
|--------|--------------------------------------------------------------|
| MW:    | MOLECULAR WEIGHT                                             |
| MF:    | MOLECULAR FORMULA                                            |
| VOC:   | VOLATILE ORGANIC COMPOUNDS                                   |
| ACGIH: | AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL<br>HYGIENISTS |
| CAS:   | CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER                   |
| OSHA:  | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION                |
| PEL:   | PERMISSIBLE EXPOSURE LIMIT (OSHA)                            |
| TLV:   | THRESHOLD LIMIT VALUE (ACGIH)                                |

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