



## MATERIAL SAFETY DATA SHEET

### 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name: 2,6-DICHLOROPYRAZINE

CAS-No.: 4774-14-5

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company: MHX (Changzhou) Biotech Limited

Telephone: +86 519 88721112

Fax: +86 519 88721515

E-mail address: supporting@mhxbio.com

### 2. HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]**

SKIN IRRITATION (CATEGORY 2)

EYE IRRITATION (CATEGORY 2)

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3)

**CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC OR 1999/45/EC**

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

#### 2.2 LABEL ELEMENTS

**LABELLING ACCORDING REGULATION (EC) NO 1272/2008 [CLP]**

PICTOGRAM



SIGNAL WORD WARNING

HAZARD STATEMENT(S)

H315 CAUSES SKIN IRRITATION.

H319 CAUSES SERIOUS EYE IRRITATION.

H335 MAY CAUSE RESPIRATORY IRRITATION.

PRECAUTIONARY STATEMENT(S)

P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.

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

REMOVE

CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

SUPPLEMENTAL HAZARD NONE

STATEMENTS

**ACCORDING TO EUROPEAN DIRECTIVE 67/548/EEC AS AMENDED.**

HAZARD



SYMBOL(S)

R-PHRASE(S)

R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S-PHRASE(S)

S26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND



SEEK MEDICAL ADVICE.

S37/39 WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION.

**2.3 OTHER HAZARDS - NONE**

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

#### **3.1 SUBSTANCES**

FORMULA : C<sub>4</sub>H<sub>2</sub>CL<sub>2</sub>N<sub>2</sub>

MOLECULAR WEIGHT : 148,98 G/MOL

COMPONENT CONCENTRATION

#### **2,6-DICHLOROPYRAZINE**

CAS-NO. 4774-14-5

EC-NO. 225-316-8

### **4. FIRST AID MEASURES**

#### **4.1 DESCRIPTION OF FIRST AID MEASURES**

##### **GENERAL ADVICE**

CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

##### **IF INHALED**

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

##### **IN CASE OF SKIN CONTACT**

WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.

##### **IN CASE OF EYE CONTACT**

RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

##### **IF SWALLOWED**

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

#### **4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

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

NO DATA AVAILABLE

### **5. FIREFIGHTING MEASURES**

#### **5.1 EXTINGUISHING MEDIA**

##### **SUITABLE EXTINGUISHING MEDIA**

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

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

CARBON OXIDES, NITROGEN OXIDES (NO<sub>x</sub>), HYDROGEN CHLORIDE GAS

#### **5.3 ADVICE FOR FIREFIGHTERS**

WEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING IF NECESSARY.

#### **5.4 FURTHER INFORMATION**

NO DATA AVAILABLE

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

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

USE PERSONAL PROTECTIVE EQUIPMENT. AVOID DUST FORMATION. AVOID BREATHING VAPORS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.



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## 6.2 ENVIRONMENTAL PRECAUTIONS

DO NOT LET PRODUCT ENTER DRAINS.

## 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

## 6.4 REFERENCE TO OTHER SECTIONS

FOR DISPOSAL SEE SECTION 13.

## 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION.

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.

### 7.3 SPECIFIC END USES

NO DATA AVAILABLE

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

### 8.2 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.

THE SELECTED PROTECTIVE GLOVES HAVE TO SATISFY THE SPECIFICATIONS OF EU DIRECTIVE 89/686/EEC AND THE STANDARD EN 374 DERIVED FROM IT.

##### BODY PROTECTION

IMPERVIOUS CLOTHING, 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).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- A) APPEARANCE FORM: SOLID
- B) ODOUR NO DATA AVAILABLE
- C) ODOUR THRESHOLD NO DATA AVAILABLE
- D) PH NO DATA AVAILABLE
- E) MELTING POINT/FREEZING POINT MELTING POINT/RANGE: 55 - 58 °C - LIT.
- F) INITIAL BOILING POINT AND BOILING RANGE NO DATA AVAILABLE
- G) FLASH POINT 113 °C - CLOSED CUP
- H) EVAPORATION RATE NO DATA AVAILABLE
- I) FLAMMABILITY (SOLID, GAS) NO DATA AVAILABLE
- J) UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS NO DATA AVAILABLE
- K) VAPOUR PRESSURE NO DATA AVAILABLE
- L) VAPOUR DENSITY NO DATA AVAILABLE
- M) RELATIVE DENSITY NO DATA AVAILABLE
- N) WATER SOLUBILITY NO DATA AVAILABLE
- O) PARTITION COEFFICIENT: NOCTANOL/WATER NO DATA AVAILABLE
- P) AUTOIGNITION TEMPERATURE NO DATA AVAILABLE
- Q) DECOMPOSITION TEMPERATURE NO DATA AVAILABLE
- R) VISCOSITY NO DATA AVAILABLE
- S) EXPLOSIVE PROPERTIES NO DATA AVAILABLE
- T) OXIDIZING PROPERTIES NO DATA AVAILABLE

### 9.2 OTHER SAFETY INFORMATION

NO DATA AVAILABLE

## 10. STABILITY AND REACTIVITY

### 10.1 REACTIVITY

NO DATA AVAILABLE

### 10.2 CHEMICAL STABILITY

NO DATA AVAILABLE

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

NO DATA AVAILABLE

### 10.4 CONDITIONS TO AVOID

NO DATA AVAILABLE

### 10.5 INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENTS

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE

## 11. TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

#### ACUTE TOXICITY

NO DATA AVAILABLE

#### SKIN CORROSION/IRRITATION

NO DATA AVAILABLE

#### SERIOUS EYE DAMAGE/EYE IRRITATION



NO DATA AVAILABLE

**RESPIRATORY OR SKIN SENSITIZATION**

NO DATA AVAILABLE

**GERM CELL MUTAGENICITY**

NO DATA AVAILABLE

**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.

**REPRODUCTIVE TOXICITY**

NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE**

INHALATION - MAY CAUSE RESPIRATORY IRRITATION.

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE**

NO DATA AVAILABLE

**ASPIRATION HAZARD**

NO DATA AVAILABLE

**POTENTIAL HEALTH EFFECTS**

**INHALATION** MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION.

**INGESTION** MAY BE HARMFUL IF SWALLOWED.

**SKIN** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION.

**EYES** CAUSES SERIOUS EYE IRRITATION.

**SIGNS AND SYMPTOMS OF EXPOSURE**

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

**ADDITIONAL INFORMATION**

RTECS: NOT AVAILABLE

**12. ECOLOGICAL INFORMATION**

**12.1 TOXICITY**

NO DATA AVAILABLE

**12.2 PERSISTENCE AND DEGRADABILITY**

NO DATA AVAILABLE

**12.3 BIOACCUMULATIVE POTENTIAL**

NO DATA AVAILABLE

**12.4 MOBILITY IN SOIL**

NO DATA AVAILABLE

**12.5 RESULTS OF PBT AND VPVB ASSESSMENT**

NO DATA AVAILABLE

**12.6 OTHER ADVERSE EFFECTS**

NO DATA AVAILABLE

**13. DISPOSAL CONSIDERATIONS**

**13.1 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



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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.

**14. TRANSPORT INFORMATION**

**14.1 UN NUMBER**

ADR/RID: - IMDG: - IATA: -

**14.2 UN PROPER SHIPPING NAME**

ADR/RID: NOT DANGEROUS GOODS

IMDG: NOT DANGEROUS GOODS

IATA: NOT DANGEROUS GOODS

**14.3 TRANSPORT HAZARD CLASS(ES)**

ADR/RID: - IMDG: - IATA: -

**14.4 PACKAGING GROUP**

ADR/RID: - IMDG: - IATA: -

**14.5 ENVIRONMENTAL HAZARDS**

ADR/RID: NO IMDG MARINE POLLUTANT: NO IATA: NO

**14.6 SPECIAL PRECAUTIONS FOR USER**

NO DATA AVAILABLE

**15. REGULATORY INFORMATION**

THIS SAFETY DATASHEET COMPLIES WITH THE REQUIREMENTS OF REGULATION (EC) NO.  
1907/2006.

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE  
SUBSTANCE OR MIXTURE**

NO DATA AVAILABLE

**15.2 CHEMICAL SAFETY ASSESSMENT**

NO DATA AVAILABLE

**16: Other information**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.