## PAGE 1 OF 3

## CHEMISPHERE SOLUTIONS LTD 15 Calder Place, St Albert Alberta T8N 5A6 (780) 460-4670

### MATERIAL SAFETY DATA SHEET

## **SECTION I PRODUCT IDENTIFICATION**

PRODUCT NAME: CHEM BLU32 (L0032) EMERGENCY TEL: CANUTEC

(613) 996-6666 24 hours

PRODUCT USE: Reduce Nitrogen Oxide Emissions from Diesel Engines

MANUFACTURERS NAME: CHEMISPHERE SOLUTIONS LTD.

ADDRESS: 15 Calder Place, St Albert Alberta, T8N 5A6

SUPPLIER: Same as above.

WHMIS CLASSIFICATION: Not controlled

TDG CLASSIFICATION: Not controlled

### **SECTION II HAZARDOUS INGREDIENTS**

MATERIAL % CAS NUMBER TOXICITY DATA: LD5o,mg/kg LC5o mg/m3

Oral rat derma

14,300-15,000

dermal rat

UREA 32.5 57-13-6 WATER 67.5 007732-18-5

## SECTION III PHYSICAL DATA

PHYSICAL STATE: Liquid VAPOUR PRESSURE: (mmHg) Not determined

COLOUR: VAPOUR DENSITY: (AIR=1) 0.6 H2O,>1

ODOUR: Slight Ammonia Odor EVAPORATION RATE: water =1 Not determined

BOILING POINT: 104°C SPECIFIC GRAVITY: g/cc 1.094 @ 25C

FREEZING POINT: -12°C PH as is 9.0-10.0

SOLUBILITY: 100% ODOUR THRESHOLD: Not determined

COEFFICIENT OF WATER/OIL: Not determined

## **SECTION IV FIRE AND EXPLOSION DATA**

FLASH POINT (TEST METHOD) Not applicable

FLAMMABILITY LIMITS IN AIR, % BY VOLUME n/a LOWER: n/a UPPER: n/a

AUTO-IGNITION TEMP.: Container may rupture if exposed to excessive heat or open flame.

MEANS OF EXTINCTION: CO2, Dry Chemical, Water Spray to extinguish the surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: May include CO2, oxides of nitrogen, ammonia and other irritating fumes.

SPECIAL FIREFIGHTING PROCEDURES: Use water to keep fire-exposed containers cool. Use water fog to reduce

concentration if necessary. Full protective equipment including self -

contained breathing apparatus should be worn.

EXPLOSION DATA – SENSITIVITY TO MECHANICAL IMPACT: None

EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE:

### MATERIAL SAFETY DATA SHEET

#### SECTION V REACTIVITY DATA

CHEMICAL STABILITY: Chemically Stable -

CHEMICAL INCOMPATIBILITY (MATERIAL & CONDITIONS):

Urea reacts with calcium hypochlorite or sodium hypochlorite to form

the explosive nitrogen trichloride.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous

decomposition products should not be produced.

### SECTION VI TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY - SKIN CONTACT: x EYE CONTACT: x

INGESTION: x INHALATION:

EFFECTS OF EXPOSURE - ACUTE AND CHRONIC:

Eyes: No known significant effects or critical hazards. Skin: No known significant effects or critical hazards. Ingestion: No known significant effects or critical hazards.

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

EXPOSURE LIMITS: None known.

SENSITIZATION TO PRODUCT: No known significant effects or critical hazards.

CARCINOGENICITY: No known significant effects or critical hazards.

REPRODUCTIVE TOXICITY: No known significant effects or critical hazards.

TERATOGENICITY: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

TOXICOLOGICALLY SYNERGISTC PRODUCTS No known significant effects or critical hazards.

## SECTION VII PERSONAL PROTECTIVE EQUIPMENT

GLOVES: Wash hands before eating, drinking, smoking or using toilet facilities. Protective gloves.

EYES: Use gas tight chemical safety goggles .

FOOTWEAR: n/a

RESPIRATOR: Avoid breathing vapors.

CLOTHING: Protective clothing.

### **SECTION VIII PREVENTATIVE MEASURES**

STORAGE REQUIREMENTS: Store in closed container in cool dry area. Avoid freezing.

SHIPPING INFORMATION: Not regulated under TDG

LEAK AND SPILLAGE PROCEDURES: Use floor absorbent, or other absorbent material to soak up spill. Do not allow to enter

sewers and waterways.

HANDLING PROCEDURES: Avoid eye and skin contact. Avoid breathing mist or spray.

WASTE DISPOSAL: In accordance with local regulations.

# **MATERIAL SAFETY DATA SHEET**

### SECTION IX FIRST AID MEASURES

EYES: Rinse with plenty of running water. Check for and remove any contact lenses. Get medical attention if

irritation occurs.

SKIN: Wash with soap and water. Get medical attention if irritation occurs

INGESTION: If not convulsing, rinse out mouth and give 1-2 glasses water to dilute. Do NOT induce vomiting. Seek

medical aid. .

INHALATION: Remove patient to fresh air. Seek medical aid at once.

### **SECTION X PREPARATION INFORMATION**

PREPARED TECHNICAL DEPARTMENT

BY:

**TELEPHONE**: (780) 460-4670

DATE: January 2017

IMPORTANT: The information presented herein is believed to be accurate and is offered only as a guide. Users should make their own tests to determine the suitability of these products for their own particular purposes. Users assume all risk of use, storage and handling of the product. No warranty, express or implied, is made including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. Nothing contained herein shall be construed as a license to operate under, or recommendation to infringe any patents.