

MATERIAL SAFETY DATA SHEET

DiaPharma CS-UK (DPG444-25)

Version: 20110531-R0

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DiaPharma CS – UK
SYNONYMS: DPG444 25 mg Substrate, DPG Urokinase Substrate, 25 mg
PRODUCT CODES: DPG444-25

MANUFACTURED FOR: DiaPharma Group, Inc.

ADDRESS: 8948 Beckett Road, West Chester, OH 45069

MAIN PHONE: +1.513.860.9324

FAX: +1.513.860.9635

PRODUCT USE: **For in vitro research use only. Not for human or drug use.** Highly sensitive chromogenic peptide substrate for urokinase (UK). Determination of urokinase for research, in-process, and quality control.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: Each vial contains chromogenic substrate UK 25 mg and mannitol 40 mg as a bulking agent.

CHEMICAL CHARACTERISATION NAME: Pyr-Gly-Arg-pNA · HCl
Pyroglutamyl-glycyl-arginine-paranitroanilide hydrochloride salt

HAZARDOUS INGREDIENTS: para-nitroaniline

CAS NO. 100-01-6 (para-nitroaniline)

EINECS-NO. 202-810-1 (para-nitroaniline)

SECTION 3: HAZARDS IDENTIFICATION

WARNING: Usual precautions are to be taken when handling chemicals.

To our knowledge the health hazards for the intact compound have not been thoroughly investigated. Free para-nitroaniline is a toxic substance which, at a maximum concentration of 1 ppm in the working place, exerts negative effects already in small quantities. Although free para-nitroaniline represents the toxic constituent of the compounds it cannot be excluded to not have toxic properties also when bound to a peptide. However, it has to be noted that the para-nitroaniline concentration in the chromogenic substrate is so low that para-nitroaniline released during a total conversion of the substrate is still dissolved in the aqueous solution. Chromogenic substrates are per se not volatile. With a boiling point of 332°C it has not to be feared that it is unlikely that para-nitroaniline will be present in the gaseous or vapor phase.

SECTION 4: FIRST AID MEASURES

EYES: Flush eyes with water. If persistent irritation occurs, seek medical advice.

SKIN: Wash with water. If persistent irritation occurs, seek medical advice.

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INGESTION: Wash mouth thoroughly with water and drink water, and induce vomiting.

INHALATION: Immediately give oxygen.

If required, perform symptomatic treatment and seek medical advice. After absorption of the substance, immediately drink plenty of water and seek medical advice.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES: None known.

EXTINGUISHING MEDIA: Fire Class A extinguishers, eye-rinsing devices.

Use approved self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Immediately clean contaminated clothes. No known precautions to protect the environment are needed. Wear gloves. Other PPE is not necessary. If spilled, immediately clean up any spillage by diluting with water and absorb.

Free para-nitroaniline, as poorly water-soluble needles, has to be dissolved in a non-flammable solvent before being destroyed by combustion. Chromogenic proteinase substrates are completely soluble in water even after accomplished enzyme determination. We recommend to collect all the solution residues and to dispose of in the same way as organic solvents (combustion).

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid skin and eye contact and particle inhalation. Store the product in a dry place protected from light at a temperature of +2 to +8°C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION : No particular ventilation requirements.

RESPIRATORY PROTECTION: Face mask.

EYE PROTECTION: Eye protection is recommended.

SKIN PROTECTION: Gloves are recommended. The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Other protective clothing is not needed.

WORK HYGIENIC PRACTICES: The usual precautionary measures are to be adhered to when handling chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Powder, Off-White

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ODOR: Odorless

SOLUBILITY IN WATER: Miscible with water

SECTION 10: STABILITY AND REACTIVITY

STABILITY: No hazardous reactions known if handled correctly.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: para-nitroaniline

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Possible allergic reactions with skin contact, eye contact, inhalation.

Nitroaniline is an extremely potent poison for blood. In small quantities it leads to methemoglobin formation. Its effect is strongly increased by alcohol. Locally it causes severe irritations of skin and mucous membranes. Repeated contact with skin provokes dermatites. Oral absorption, inhalation of dust or skin resorption leads to headache, flushed face, respiratory troubles, nausea, vomiting, general weakness, tiredness, cyanosis and coma.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This product is readily miscible with water. Water-contaminating substance. Mobility, persistence and degradability, bioaccumulative potential not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Collect in steel containers. Disposal should be made in accordance with existing disposal practices employed according to local and national legislation.

SECTION 14: TRANSPORT INFORMATION

Transportation of the product is not regulated by ADR. Fragile containers, handle with care.

SECTION 15: REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT): Not applicable. For in vitro research use only.

Packing in glass containers, no special labeling requirements.

For further information, we recommend consideration of the corresponding appropriate national legislation.

SECTION 16: OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on this Material Safety Data Sheet. DiaPharma Group, Inc. shall not be held responsible for any defect in the product covered by this Material Safety Data Sheet, should the existence of such a defect not be detectable considering the current state of scientific and technical knowledge.