

Material Safety Data Sheet (Conforms to 91/155/EEC - 2001/58/EC) Issue Date: 28-Jun-2007 NA160TCP

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** INSTANT COLD PACK WITH UREA

#### SUPPLIER

Company: RELIANCE MEDICAL LTD Address: THE RADNOR BUILDING, RADNOR PARK TRADING ESTATE, CONGLETON CW12 4XP

PRODUCT USE: SHJ0010837

SYNONYMS

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS			
NAME	CAS RN	INT HAZ	%
water EC NO: 231-791-2	7732-18-5	None	50
urea EC NO: 200-315-5	57-13-6	None	50

#### **Section 3 - HAZARDS IDENTIFICATION**

#### STATEMENT OF HAZARDOUS NATURE

Not considered a dangerous substance according to directive 1999/45/EC and its amendments.

#### HAZARD RATINGS

Flammability Toxicity Body Contact Reactivity Chronic					
SCALE:	Min/Nil=0	Low=1	Moderate=2	High=3	Extreme=4

#### POTENTIAL HEALTH EFFECTS

#### **ACUTE HEALTH EFFECTS**

### SWALLOWED

Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual,

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# **Section 3 - HAZARDS IDENTIFICATION**

following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

## EYE

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

#### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

#### INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

## **CHRONIC HEALTH EFFECTS**

## Section 4 - FIRST AID MEASURES

No data for this material.

## Section 5 - FIRE FIGHTING MEASURES

No data for this material.

## PERSONAL PROTECTION

Glasses: Gloves: Respirator:

## Section 6 - ACCIDENTAL RELEASE MEASURES

# **EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)**

The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

life-threatening health effects is: water 500 mg/m urea 500 mg/m

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is: water 500 mg/m urea 15 mg/m

other than mild, transient adverse effects without perceiving a clearly defined odour is:

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## Section 6 - ACCIDENTAL RELEASE MEASURES

water 500 mg/m 2 mg/m urea

The threshold concentration below which most people will experience no appreciable risk of health effects: water 500 mg/m urea

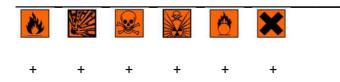
0.6 mg/m

American Industrial Hygiene Association (AIHA)

Ingredients considered	d according to the follo	owing cutoffs	
Very Toxic (T+)	>= 0.1%	Toxic (T)	>= 3.0%
R50	>= 0.25%	Corrosive (C)	>= 5.0%
R51	>= 2.5%		
else	>= 10%		
where a second and is a second and off is supplicated for and in the projections			

where percentage is percentage of ingredient found in the mixture

## SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+; May be stored together

May be stored together with specific preventions 0:

X: Must not be stored together

# Section 7 - HANDLING AND STORAGE

## **PROCEDURE FOR HANDLING**

No data for this material. No data for this material.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

## **EXPOSURE CONTROLS**

The following materials had no OELs on our records

- water: CAS:7732-18-5
- CAS:57-13-6 • urea:

#### MATERIAL DATA

Not available.

Refer to individual constituents.

#### **INGREDIENT DATA**

UREA:

WATER:

No exposure limits set by NOHSC or ACGIH.

WATER:

UREA:

CEL TWA: 10 mg/m3 (compare WEEL-TWA)

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# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Even if individuals inhaled 10 mg/m3 of urea through the whole workday, they would only inhale 100 mg/day. This increment, even if totally absorbed, would be insignificant when compared to the 30 g/day normal excretion rate. The workplace environmental exposure limit (WEEL) established by the AIHA is protective against the effects of urea as a nuisance dust.

### PERSONAL PROTECTION



## OTHER

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

# **ENGINEERING CONTROLS**

No data for this material.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

## **PHYSICAL PROPERTIES**

Molecular Weight: Melting Range (°C): Solubility in water (g/L): pH (1% solution): Volatile Component (%vol): Relative Vapour Density (air=1): Lower Explosive Limit (%): Autoignition Temp (°C): State: Boiling Range (°C): Specific Gravity (water=1): pH (as supplied): Vapour Pressure (kPa): Evaporation Rate: Flash Point (°C): Upper Explosive Limit (%): Decomposition Temp (°C): Not available Viscosity: Not available

# APPEARANCE

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

# CONDITIONS CONTRIBUTING TO INSTABILITY

No data for this material.

## Section 11 - TOXICOLOGICAL INFORMATION

# INSTANT COLD PACK WITH UREA

Not available. Refer to individual constituents. unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

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## Section 11 - TOXICOLOGICAL INFORMATION

#### WATER:

No significant acute toxicological data identified in literature search.

UREA: TOXICITY Oral (rat) LD50: 8471 mg/kg Intraperitoneal (rat) LD50: >5000 mg/kg Subcutaneous (rat) LD50: 8200 mg/kg Intratracheal (rat) LD50: 567 mg/kg Oral (mouse) LD50: 11000 mg/kg Subcutaneous (mouse) LD50: 9200 mg/kg Intravenous (mouse) LD50: 4600 mg/kg

IRRITATION Skin (human): 22 mg/3 d (I)- Mild

NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA. Altered sleep time, change in motor activity, antipsychosis, dyspnea, methaemoglobinaemia, convulsions, lymphomas recorded. Carcinogenic by RTECS criteria.

# Section 12 - ECOLOGICAL INFORMATION

No data for INSTANT COLD PACK WITH UREA. Refer to data for ingredients, which follows:

UREA:

Algae IC50 (72hr.) (mg/l):	10000
log Kow (Prager 1995):	- 1.09
log Kow (Sangster 1997):	- 2.11
log Pow (Verschueren 1983):	1.31415929

log Kow: -2.97- -2.26

#### Section 13 - DISPOSAL CONSIDERATIONS

According to the European Waste Catalogue, Waste Codes are not product specific but application specific. Waste Codes should be assigned by the User based on the application in which the product is used.

## Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:ADR, IATA, IMDG

## Section 15 - REGULATORY INFORMATION

# RISK

None under normal operating conditions.

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# Section 15 - REGULATORY INFORMATION

#### REGULATIONS

water (CAS: 7732-18-5) is found on the following regulatory lists; OECD Representative List of High Production Volume (HPV) Chemicals

urea (CAS: 57-13-6) is found on the following regulatory lists; IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances OECD Representative List of High Production Volume (HPV) Chemicals

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - : 67/548/EEC, 1999/45/EC, 76/769/EEC, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC, 1999/13/EC, as well as the following British legislation:
The Control of Substances Hazardous to Health Regulations (COSHH) 2002
COSHH Essentials
The Management of Health and Safety at Work Regulations 1999

#### **Section 16 - OTHER INFORMATION**

#### **RISK**

Explanation of Risk Codes used in the Ingredient Table Risk Codes Risk Phrases

# **REPRODUCTIVE HEALTH GUIDELINES**

These exposure guidelines have been derived from a screening level of risk assessment and should not be construed as unequivocally safe limits. ORGS represent an 8-hour time -weighted average unless specified otherwise.

CR = Cancer Risk/10000; UF = Uncertainty factor:

TLV believed to be adequate to protect reproductive health:

LOD: Limit of detection

Toxic endpoints have also been identified as:

D = Developmental; R = Reproductive; TC = Transplacental carcinogen Jankovic J., Drake F.: A Screening Method for Occupational Reproductive American Industrial Hygiene Association Journal 57: 641-649 (1996).

#### **EXPOSURE STANDARD FOR MIXTURES**

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components and concentration:

Composite Exposure Standard for Mixture (TWA) :18.1818 mg/m<sup>3</sup>. Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone. If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.

Component Breathing Zone ppm Breathing Zone mg/m3 Mixture Conc (%).

Component	Breathing Zone	Mixture Conc
	(mg/m?	(%)
urea	9.0909	50.0

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