

Chemwatch Material Safety Data Sheet (Conforms to 91/155/EEC - 2001/58/EC)

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

INSTANT COLD PACK WITH UREA

PRODUCT USE

SHJ0010837

SYNONYMS

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

Section 3 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

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

HAZARD RATINGS



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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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 urea 2 mg/m

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 according to the following cutoffs

 Very Toxic (T+)
 >= 0.1%
 Toxic (T)
 >= 3.0%

 R50
 >= 0.25%
 Corrosive (C)
 >= 5.0%

 P51
 >= 2.5%

R51 >= 2.5% else >= 10%

where percentage is percentage of ingredient found in the mixture

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+: May be stored together

O: May be stored together with specific preventions

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 • urea: CAS:57-13-6

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)

continued...

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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

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

continued...

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

IRRITATION

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

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): 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

Section 15 - REGULATORY INFORMATION

HAZCHEM: None

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

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 Phrases Risk Codes

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/m³.

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 s exceeded,

"Worst Case" considerations deem the individual to be overexposed.

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

Mixture Conc Component Breathing Zone

(mg/m?

(%)

9.0909 urea

50.0

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Section 16 - OTHER INFORMATION

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