SAFETY DATA SHEET Ultragel II ®

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Ultragel II ®

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

Identified uses Nondestructive testing (NDT) Ultrasonic Couplant.

1.3. Details of the supplier of the safety data sheet

Supplier CHARLES TENNANT & CO. LTD

UNIT 71, COOKSTOWN INDUSTRIAL

ESTATE

BELGARD ROAD TALLAGHT DUBLIN 24 IRELAND

+353 (0)1 451 4099 +353 (0)1 451 4702 info@ctennant.ie

Contact Person SDS Contact: DCM Compliance, info@dcmcompliance.com

1.4. Emergency telephone number

0044 1865 407333

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Not classified.

Hazards

Human health Not classified. Environment Not classified.

Classification (1999/45/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

No pictogram required.

Supplemental label information

EUH210 Safety data sheet available on request.

2.3. Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1.4-DIOXANE < 1% CAS-No.: 123-91-1 EC No.: 204-661-8 Classification (EC 1272/2008) Classification (67/548/EEC) **EUH019** F;R11,R19 Flam. Lig. 2 - H225 Carc. Cat. 3;R40 **EUH066** Xi:R36/37 Eye Irrit. 2 - H319 R66 Carc. 2 - H351 STOT SE 3 - H335 **BENZENE** < 1% CAS-No.: 71-43-2 EC No.: 200-753-7

Classification (EC 1272/2008) Classification (67/548/EEC) Flam. Liq. 2 - H225 F;R11 Skin Irrit. 2 - H315 Carc. Cat. 1;R45 Eye Irrit. 2 - H319 Muta. Cat. 2;R46 Muta. 1B - H340 T;R48/23/24/25 Carc. 1A - H350 Xn;R65 STOT RE 1 - H372 Xi;R36/38 Asp. Tox. 1 - H304

DIETHANOLAMINE < 1% CAS-No.: 111-42-2 EC No.: 203-868-0 Classification (EC 1272/2008) Classification (67/548/EEC) Acute Tox. 4 - H302 Xn;R22,R48/22

Skin Irrit. 2 - H315 Xi;R38,R41 Eve Dam. 1 - H318 STOT RE 2 - H373

ETHYLENE OXIDE < 1% CAS-No.: 75-21-8 EC No.: 200-849-9

Classification (EC 1272/2008) Classification (67/548/EEC) Flam. Gas 1 - H220 F+;R12 R6

Acute Tox. 3 - H331 Carc. Cat. 2;R45 Skin Irrit. 2 - H315 Muta. Cat. 2;R46

Eye Irrit. 2 - H319 T:R23 Muta. 1B - H340 Xi;R36/37/38

Carc. 1B - H350 STOT SE 3 - H335

10-20% **Glycerol**

CAS-No.: 56-81-5 EC No.: 200-289-5

Classification (EC 1272/2008) Classification (67/548/EEC)

Not classified. Not classified.

propane-1,2-diol 20-30%

CAS-No.: 57-55-6 EC No.: 200-338-0

Classification (EC 1272/2008) Classification (67/548/EEC)

Not classified. Not classified.

PROPYLENE OXIDE < 1%

CAS-No.: 75-56-9 EC No.: 200-879-2

Classification (EC 1272/2008) Classification (67/548/EEC)

Flam. Liq. 1 - H224 F+;R12

Acute Tox. 4 - H302 Carc. Cat. 2;R45
Acute Tox. 4 - H312 Muta. Cat. 2;R46
Acute Tox. 4 - H332 Xn;R20/21/22
Skin Irrit. 2 - H315 Xi;R36/37/38

Eye Irrit. 2 - H319 Muta. 1B - H340 Carc. 1B - H350 STOT SE 3 - H335

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

General first aid, rest, warmth and fresh air.

Inhalation

Move into fresh air and keep at rest.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

Skin contact

Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

May cause respiratory tract irritation.

Ingestion

May cause stomach distress, nausea or vomiting.

Skin contact

May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of skin.

Eve contact

May cause temporary eye irritation. Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY! Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Oxides of: Carbon.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

If possible, fight fire from protected position. Keep up-wind to avoid fumes. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Do not contaminate water sources or sewer. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store near room temperature away from sunlight.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,4-DIOXANE	OEL	25 ppm(Sk)	91 mg/m3(Sk)	100 ppm(Sk)	366 mg/m3(Sk)	
BENZENE	OEL	1 ppm(Sk)	3 mg/m3(Sk)			
DIETHANOLAMINE	OEL	No std.	1 mg/m3	No std.	No std.	
ETHYLENE OXIDE	OEL	5 ppm	10 mg/m3	No std.	No std.	
Glycerol	OEL	No std.	10 mg/m3	No std.	No std.	
propane-1,2-diol	OEL	150 ppm	470 mg/m3	No std.	No std.	
PROPYLENE OXIDE	OEL	5 ppm	12 mg/m3	No std.	No std.	

OEL = Occupational Exposure Limit.

Ingredient Comments

Ireland, Occupational Exposure Limits 2011

8.2. Exposure controls

Protective equipment





Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Hand protection

Wear chemical protective gloves that are in accordance with EN 374. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear. The following materials are suitable:

Material : butyl-rubber Break through time : >= 8 h Glove thickness : 0.5 mm

Eye protection

Wear safety goggles in accordance with EN166. Eye protection equipment should be tested and approved according to regulations applicable, like NIOSH (US) or EN 166 (EU).

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Take off immediately all contaminated clothing. Avoid contact with skin, eyes and clothing.

Skin protection

Use barrier creams to prevent skin contact.

Environmental Exposure Controls

Keep container tightly sealed when not in use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Coloured gel.

ColourBlue.OdourFragrant.

Solubility Completely soluble in water

Initial boiling point and boiling range (°C)

Not determined.

Melting point (°C)

Not determined.

Relative density 1.06g/ml

Bulk Density

Not determined.

Vapour density (air=1)

Not determined.

Vapour pressure

Not determined.

Evaporation rate

Not determined.

pH-Value, Conc. Solution

Not determined.

Viscosity

Not determined.

Decomposition temperature (°C)

Not determined.

Flash point (°C)

Not determined.

Flammability Limit - Lower(%)

Not determined.

Flammability Limit - Upper(%)

Not determined.

Explosive properties

Not determined.

Oxidising properties

Not determined.

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Keep away from: heat sources, combustible materials, oxidizing agents, acids, bases, water/moisture

10.6. Hazardous decomposition products

Oxides of: Carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> Rabbit 2000 mg/kg

Skin Corrosion/Irritation:

Irritating.

Serious eye damage/irritation:

Slightly Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not determined.

Skin sensitisation

Not determined.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Not determined.

Genotoxicity - In Vivo

Not determined.

Carcinogenicity:

IARC Carcinogenicity

Contains substances listed as Carcinogenic to humans or possibly Carcinogenic to humans.

NTP - Carcinogenicity

Contains substances listed as Carcinogenic to humans or possibly Carcinogenic to humans.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not determined.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Not determined.

Inhalation

May cause irritation to the respiratory system.

Ingestion

May cause stomach distress, nausea or vomiting.

Skin contact

May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of skin.

Eye contact

May cause temporary eye irritation.

Route of entry

Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

No ecological toxicity available on the overall finished product.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

2011 Code of Practice for the Safety, Health and Welfare at Work(Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation EC 1272/2008 on the classification, labelling and packaging (CLP) of substances and mixtures which entered into force on 20 January 2009 and replaced both Dangerous Substance Directive 67/548/EC (DSD) and Dangerous Preparation Directive 1999/45/EC.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision

Risk Phrases In Full

R6 Explosive with or without contact with air.

Extremely flammable. R12

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R22 Harmful if swallowed.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R65 Harmful: may cause lung damage if swallowed.

R11 Highly flammable

R36/37 Irritating to eyes and respiratory system.

Irritating to eyes and skin. R36/38

R36/37/38 Irritating to eyes, respiratory system and skin.

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

R45 May cause cancer.

R46 May cause heritable genetic damage.

R19 May form explosive peroxides.

NC Not classified.

R66 Repeated exposure may cause skin dryness or cracking.

Risk of serious damage to eyes. R41

R23 Toxic by inhalation.

R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation.

in contact with skin and if swallowed.

Hazard Statements In Full

Causes damage to organs << Organs>> through prolonged or repeated exposure. H372

H318 Causes serious eye damage. H319 Causes serious eve irritation.

H315 Causes skin irritation. H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour.

Harmful if inhaled. H332 H302 Harmful if swallowed

Harmful in contact with skin. H312 H225

Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H350 May cause cancer.

H373 May cause damage to organs << Organs>> through prolonged or repeated exposure.

H340 May cause genetic defects. May cause respiratory irritation. H335 **EUH019** May form explosive peroxides.

EUH066 Repeated exposure may cause skin dryness or cracking.

H351 Suspected of causing cancer.

H331 Toxic if inhaled.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.