

SAFETY DATA SHEET

ULTRAFIL R690M

Infosafe No.: LQ710
ISSUED Date : 05/03/2022
ISSUED by: THE LINCOLN ELECTRIC CO.
(AUSTRALIA) PTY. LTD.

Section 1 - Identification

Product Identifier

ULTRAFIL R690M

Company Name

THE LINCOLN ELECTRIC CO. (AUSTRALIA) PTY. LTD.

Address

35 Bryant Street Padstow
NSW AUSTRALIA

Telephone/Fax Number

Tel: (02) 9772 7240

Emergency Phone Number

1300 728 720

Recommended use of the chemical and restrictions on use

For welding

Other Names

Name
ULTRAFIL R71C
ULTRAFIL R71D
ULTRAFIL RNi1M
ULTRAFIL M71M

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

IMPORTANT NOTE(S)**EXPOSURE DURING USE**

As shipped, these electrodes have no known toxicological properties other than causing allergic reactions to individuals sensitive to the metal(s) contained in these welding products.

When this product is used in a welding process the following hazards are most important:

Heat:

Splatter, hot, or molten metals can cause burns and start fires. Welding arc and sparks can ignite combustible and flammable materials.

Radiation:

Arc rays can damage skin and eyes.

Electrical:

Electric shock can kill.

Fumes:

Welding can generate fumes, mists, dust, vapours and gases, including metallic oxides, carbon dioxide, carbon monoxide, nitrogen dioxide, ozone, as well as solid particles, or other constituents from the consumables, base metal, or base metal coating. The amounts and types of fumes produced vary greatly depending on the process involved and the materials being used such as: metals, solvents, flux, paint and plastics.

The health effects of exposure to fumes, dust, vapour and gases can vary. Effects can include irritation of the upper respiratory tract (nose and throat), tightness in the chest, asphyxiation, asthma, wheezing, metal fume fever, lung damage, bronchitis, cancer, pneumonia or emphysema.

The short-term overexposure to fume and gases from welding may result in: metal fume fever, dizziness, nausea or dryness or irritant to the respiratory systems or eyes. May aggravate pre-existing respiratory problems.

The long-term overexposure to fume and gases from welding can lead to: siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects.

Welding fumes may contain substances that are suspected of being carcinogenic.

Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

Other Information

This product contains Ototoxic substances. Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Titanium dioxide	13463-67-7	<10 %
Manganese	7439-96-5	<5 %
Nickel	7440-02-0	<5 %
Copper	7440-50-8	<1 %
Silica	7631-86-9	<1 %
Zirconium	7440-67-7	<1 %
Aluminium oxide	1344-28-1	<1 %
Silicon	7440-21-3	<1 %
Aluminium	7429-90-5	<1 %
Magnesium	7439-95-4	<1 %
Molybdenum	7439-98-7	<1 %
Titanium	7440-32-6	<1 %
Fluorides (as F)	16984-48-8	<1 %
Magnesium Oxide	1309-48-4	<1 %
Iron	7439-89-6	Balance

Section 4 - First Aid Measures

Inhalation

Remove from dust or fume exposure. Keep at rest until recovered. If symptoms persist seek medical attention. Employ CPR (Cardiopulmonary Resuscitation technique) if the patient is not breathing. Seek immediate medical attention.

Ingestion

Not considered a potential route of exposure for intact product, when used as intended. Ingestion may occur when food or drinks are in contact with metal fume or powder and during hand-to-mouth activities such as drinking, eating and smoking, etc. If ingested, do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.

Skin

Wash hands after contact with material. In the event of severe arc radiation exposure seek immediate medical attention.

Eye

If dust in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention. In the event of severe arc radiation exposure seek immediate medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

In addition to standard training, first-aid responders in welding situations should know about the symptoms of electric shock, arc flash and the consequences of exposure to heated coatings on metals.

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

As shipped, this product will not burn. In case of fire: use fire extinguishing media appropriate for surrounding environment.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Carbon monoxide, carbon dioxide, ozone, oxides of nitrogen as well as solid particles may be released during decomposition whilst in use.

Specific hazards arising from the chemical

As shipped, the product is non-flammable. However, welding arc and sparks as well as open flames and hot surfaces associated with brazing and soldering can ignite combustible and flammable materials.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

Section 6 - Accidental Release Measures

Emergency Procedures

If airborne dust/fume(s) are present, use adequate engineering controls. Wear appropriate personal protective equipment and clothing to prevent exposure. Collect the material immediately and place into a suitable labelled container. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Ensure that the product is undamaged and in its original packaging. Ensure correct lifting posture when handling packages that are heavier than 15 kgs. Limit handling and movement of the product and unnecessary personal contact. When handling, do not eat drink or smoke and wash hands with a suitable hand sanitizer when finished.

Conditions for safe storage, including any incompatibilities

Store the product in its original sealed package or container in a cool, dry, low humidity environment and in compliance with any local or national regulations. Ensure that the original product labels and warning labels are intact and clearly visible. Do not store with incompatible materials and ensure that the product is protected from physical damage while in storage.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure value has been assigned for this material. However, the available exposure limits for ingredients are listed below:

Aluminium (metal dust)

TWA: 10 mg/m³

Aluminium (welding fumes) (as Al)

TWA: 5 mg/m³

Aluminium oxide

TWA: 10 mg/m³

Note/s: (a)

Copper (fume)

TWA: 0.2 mg/m³

Copper, dusts & mists (as Cu)

TWA: 1 mg/m³

Fluorides (as F)

TWA: 2.5 mg/m³

Iron oxide fume (Fe₂O₃) (as Fe)

TWA: 5 mg/m³

Magnesium oxide (fume)

TWA: 10 mg/m³

Manganese, dust & compounds (as Mn)

TWA: 1 mg/m³

Manganese, fume (as Mn)

TWA: 1 mg/m³

STEL: 3 mg/m³

Molybdenum, insoluble compounds (as Mo)

TWA: 10 mg/m³

Molybdenum, soluble compounds (as Mo)

TWA: 5 mg/m³

Nickel, metal

TWA: 1 mg/m³

Advisory carcinogen category: Carc. 2

Other advisory information: Sen

Nickel, soluble compounds (as Ni)

TWA: 0.1 mg/m³

Advisory carcinogen category: See Note

Other advisory information: Sen

Note/s: (g)

Nickel, powder

TWA: 1 mg/m³

Advisory carcinogen category: Carc. 2

Silica – Crystalline - Quartz (respirable dust)

TWA: 0.05 mg/m³

Advisory carcinogen category: Carc.1A

Silica – Amorphous - Fumed silica (respirable dust)

TWA: 2 mg/m³

Silica – Amorphous - Precipitated silica

TWA: 10 mg/m³

Note/s: (a)

Silica – Amorphous - Fume (thermally generated)(respirable dust)

TWA: 2 mg/m³

Note/s: €

Silicon

TWA: 10 mg/m³

Note/s: (a)

Titanium dioxide

TWA: 10 mg/m³

Note/s: (a)

Zirconium compounds (as Zr)

TWA: 5 mg/m³

STEL: 10 mg/m³

Welding fumes (not otherwise classified)

TWA: 1 mg/m³

Notes Key:

(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

(e) Containing no asbestos and < 1% crystalline silica.

(g) Some compounds in these groups are classified as carcinogenic or as sensitisers. Check individual classification details on the safety data sheet for information on classification.

Definitions:

Eight hour time weighted average (TWA): The maximum average airborne concentration of a substance when calculated over an eight hour working day, for a five day working week.

Short term exposure limit (STEL): The time weighted average maximum airborne concentration of a substance calculated over a 15 minute period.

Carc. 1A : Known to have carcinogenic potential for humans.

Carc. 2: Suspected human carcinogen.

Sen: Respiratory and/or Skin Sensitiser.

Source: Safe Work Australia - WORKPLACE EXPOSURE STANDARDS - FOR AIRBORNE CONTAMINANTS - January 2024

Biological Monitoring

Name: FLUORIDES

Specimen: Fluoride in urine

Value: 2 mg/L

Sampling time: Prior to shift

Name: FLUORIDES

Specimen: Fluoride in urine

Value: 3 mg/L

Sampling time: End of shift

Name: Nickel and Inorganic compounds

Determinant: Nickel in urine after exposure to elemental nickel and insoluble compounds

Value: 5µg/L

Sampling time: Post-shift at end of workweek

Notation: B

Determinant: Nickel in urine after exposure to soluble compounds

Value: 30 µg/L

Sampling time: Post-shift at end of workweek

Source: American Conference of Industrial Hygienists (ACGIH).

Control Banding

Not available

Other Exposure Information

Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.2, F1.4, and F1.5, available from the Welding Technology Institute of Australia, PO Box 6165, Silverwater, NSW 2128.

Engineering Controls

Ensure sufficient ventilation to keep airborne concentrations below exposure limits and as low as practicable. The atmosphere should be regularly checked to ensure safe working conditions are maintained. Where natural ventilation is inadequate, a local exhaust ventilation system, drawing fumes/dusts away from workers' breathing zone, is required.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate/fume filter should be used.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Use flash goggles or face shield with filter lens shade 12 or darker to avoid accidental arc radiation exposure. Final choice of appropriate eye/ face protection will vary according to individual circumstances i. e. methods of handling or engineering controls and according to risk assessments undertaken.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1338:(series) Filters for eye protectors, AS/NZS 1338.1: Filters for eye protectors - Filters for protection against radiation generated in welding and allied operations, AS/NZS 1336: Eye and face protection - Guidelines and Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves specifically made for welding purposes. Gloves should be fire resistant and protect exposed skin on the hands and wrists. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Personal Protective Equipment

Welders should wear protective clothing and eye protection appropriate to electric arc welding. Under certain conditions, welding slag can detach and fly off. Those in close proximity to welds should protect themselves from flying slag.

Thermal Hazards

No further relevant information available.

Footwear

Foot protection should be non-slip and heat and fire resistant. Avoid using foot protection that has the potential to capture hot sparks and metal debris, for example in laces or in open style shoes.

For further information refer to: AS/NZS 2210: (series) Occupational protective footwear and AS/NZS 2210.1: Safety, protective and occupational footwear - Guide to selection, care and use.

Body Protection

Wear approved body protection during arc welding which help to prevent injury from UV radiation, sparks and electrical shock. This may include arm protectors, apron, hats, shoulder protection, as well as dark substantial clothing. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.

For further information refer to: AS/NZS 4502: (series) Methods for evaluating clothing for protection against heat and fire.

Electric Shock

Electric shock may result in serious burns or death by electrocution. Special attention should be paid to the condition of the electrical connections, cable and electrode holder insulation and the presence of humid, damp and wet environments.

Before welding be familiar with the emergency procedures should a person suffer an electric shock. Inspect the condition of the welding equipment including, the proper operation of power switches, that connections and terminals are tight and properly insulated and ensure the insulation on power and welding cables is in good condition. Ensure that circuit protection components such as fuses, circuit breakers and residual current devices (RSD) are in place and operating correctly. Where manual arc welding power supplies have a voltage reduction device (VRD) fitted ensure that it is turned on. Use fully insulated electrode holders. Prevent electrode holders coming in contact with conductive surfaces connected to welding machine earth causing unexpected arcing. Do not connect or change welding cables before switching off the power at the mains.

During welding, electrodes or welding wires should not be handled with bare hands and the electrode holder is not be held under the armpit. Where practical, stand, lie or sit on non-conducting material while welding. In humid conditions minimise wet clothing by allowing time to dry during breaks, change clothing and gloves frequently. Minimise perspiration by using a fan or an air fed welding mask.

Welding Arc Radiation

The welding arc emits intense UV radiation that can cause eye irritation and burns to exposed skin. UV rays may travel significant distances and reflect from white and shiny surfaces. Both the welding operator, workers in the work place and passers-by need to adopt the appropriate personal protective equipment (PPE).

Fumes and Gases

Fumes and gases generated from the welding process can be dangerous. The level of fume generated will vary depending on the welding process and the welding parameters used. In addition gases such as helium, argon, and carbon dioxide can displace oxygen in the air and lead to suffocation, particularly when welding in confined spaces. Carbon monoxide gas can form posing another asphyxiation hazard.

Workers should position themselves to avoid breathing welding fumes and gases and adopt ventilation, natural or forced fresh air movement, to reduce exposure to fume and gas emissions to acceptable levels. Portable welding helmet mounted air fed ventilation systems can be used to remove fumes and gases from the welder's breathing zone. Keep fume hoods, fume extractor guns and vacuum nozzles as close as possible to the fume source to minimise emission levels in the surrounding work area.

Working outdoors or in open spaces does not guarantee adequate ventilation. Respiration protection may be required if work practices and ventilation do not reduce the emissions to safe levels. Alternatively consider using a lower fume generating welding consumable or welding process.

Fire and Explosions

Do not weld on containers which have held combustible or flammable materials unless procedures for the safe welding and cutting of such containers are carefully followed. Remove flammable materials from welding area or shield from sparks and heat. Keep a fire extinguisher in the welding area. Wear flame resistant clothing and headgear. Purge all traces of flammable or combustible materials from drums, vessels and tanks which are to be welded prior to welding, and preferably filled with an inert substance such as nitrogen gas or water. Use fire resistant barriers to prevent welding sparks accidentally reaching flammable and combustible materials. Check work areas are well ventilated to prevent accumulation of flammable vapours.

Hearing Protection

Ear plugs or ear muffs may be required to minimise the risks of noise. For further information refer to: AS/NZS 1270: Acoustics - Hearing protectors and AS/NZS 1269.3: Occupational noise management – Hearing protector program.

Screens

Avoid exposure to the rays of an arc during electric welding operations. Opaque or appropriate translucent screens can be used to protect the health and safety of people within the vicinity of welding. For further information refer to: AS/NZS 3957: Light-transmitting screens and curtains for welding operations.

General Welding Safety Precautions

Read and understand the manufacturer's instructions and the precautionary label on the product. According to Safe Work Australia Welding Processes Code of Practice refer to Health and Safety in Welding WTIA Technical Note No.7 for more details on precautions such as ventilation, respiratory protection and protective clothing.

Other Information

The available exposure limits for gases/fumes that may be formed during welding are listed below:

Carbon dioxide
TWA: 5000 ppm
STEL: 30000 ppm

TWA: 9000 mg/m³
STEL: 54000 mg/m³

Carbon monoxide
TWA: 30 ppm
TWA: 34 mg/m³

Nitrogen dioxide

TWA: 3 ppm

STEL: 5 ppm

TWA: 5.6 mg/m³

STEL: 9.4 mg/m³

Ozone

TWA: 0.1 ppm (Peak limitation)

TWA: 0.2 mg/m³ (Peak limitation)

Definitions:

Eight hour time weighted average (TWA): The maximum average airborne concentration of a substance when calculated over an eight hour working day, for a five day working week.

Short term exposure limit (STEL): The time weighted average maximum airborne concentration of a substance calculated over a 15 minute period.

Peak limitation: A maximum or peak airborne concentration of a substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

Source: Safe Work Australia - WORKPLACE EXPOSURE STANDARDS - FOR AIRBORNE CONTAMINANTS - January 2024

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Welding Electrode	Appearance	Solid welding wire or rod
Colour	Copper	Odour	Not available
Melting Point	Not available	Boiling Point	Not available
Decomposition Temperature	Not available	Solubility in Water	Not available
Specific Gravity	Not available	pH	Not applicable
Vapour Pressure	Not applicable	Relative Vapour Density (Air=1)	Not applicable
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not applicable	Volatile Component	Not available
Partition Coefficient: n-octanol/water (log value)	Not available	Flash Point	Not applicable
Flammability	This product is not combustible. Welding arcs can ignite surrounding combustible material.	Auto-Ignition Temperature	Not applicable
Explosion Limit - Upper	Not available	Explosion Limit - Lower	Not available
Explosion Properties	Not available	Oxidising Properties	Not available
Particle Characteristics	Not applicable		

Section 10 - Stability and Reactivity

Reactivity

Non-reactive under normal conditions of storage and transport.

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of hazardous reactions

Not available

Conditions to Avoid

Avoid heat or contamination of acids, alkalis, and oxidising agents.

Incompatible Materials

Acids, alkalis, and oxidising agents.

Hazardous Decomposition Products

Welding fumes and gases cannot be classified straightforwardly. The composition and quantity of both are dependent upon the metal being welded, the process, procedure and electrodes used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being welded (such as paint, plating, or galvanising), the number of welders and the volume of the work area, the quality and amount of ventilation, the position of the welder's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapours from cleaning and degreasing activities).

When the electrode is consumed, the fume and gas decomposition products generated will vary in proportion and form to the ingredients listed in section 3.

Fume from normal operation include those originating from the volatilisation, reaction, or oxidation of the materials shown in section 3, plus those from the base metal and coating etc., as noted above. Reasonably expected fume constituents produced during arc welding include: the oxides of iron, manganese and other metals present in the welding consumable or base metal. Gaseous reaction products may include carbon monoxide and carbon dioxide, ozone and nitrogen oxides, which may be formed by the radiation from the arc.

Hazardous Polymerization

Not available

Section 11 - Toxicological Information

Toxicology Information

No toxicity data are available for this specific product. During shielded metal arc welding, this product will emit toxic and/or irritating fumes and dusts including metal oxides.

Ingestion

Ingestion is unlikely due to the form of the product. Ingestion of food or drink contaminated by welding fume(s) may irritate the gastric tract causing nausea and vomiting.

Inhalation

Short-term (acute) overexposure to welding fumes may result in: metal fume fever, dizziness, nausea and dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (eg. asthma, emphysema). Long-term overexposure to welding fumes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects.

Skin

Skin contact may cause irritation resulting in redness and itching. Arc rays can burn skin. Skin cancer has been reported.

Eye

Eye contact may cause irritation and result in mild abrasion. Arc rays from arc welding can injure eyes. Eye disorders may be caused by exposure to intense UV and infra-red radiation while welding. Exposure to the eyes causes 'arc eye' or 'welders' flash' which is a painful inflammation of the cornea. The cornea can repair itself in one to two days, however, if the cornea becomes infected it may lead to some loss of vision.

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Crystalline silica (Quartz), Nickel compounds and welding fume are listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Nickel (metallic) and Titanium dioxide are listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Fluorides and silica amorphous are listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

Not expected to cause toxicity to a specific target organ.

STOT - Repeated Exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

Other Information

Source and Health Effects of Welding Fumes:

Carbon monoxide is formed in the arc and is absorbed readily into the bloodstream, causing headaches, dizziness or muscular weakness, as well as ototoxicity which produces a risk of hearing loss. High concentrations may result in unconsciousness and death.

Nitrogen oxides are formed in the arc and may cause eye, nose and throat irritation in low concentrations. Abnormal fluid in the lung and other serious effects can occur at higher concentrations. Chronic effects include lung problems such as emphysema. Oxygen deficiency if welding in confined spaces, and air displacement by shielding gas may cause dizziness, mental confusion, asphyxiation and death.

Ozone formed in the welding arc during open arc welding processes include: Manual Metal Arc Welding (MMAW), Flux Cored Arc Welding (FCAW), Metal Inert Gas (MIG) and Tungsten Inert Gas (TIG) processes. This may cause acute effects such as fluid in the lungs. Very low concentrations (e.g., one part per million) cause headaches and dryness of the eyes. Chronic effects include significant changes in lung function.

Iron oxides will be produced in all iron or steel welding processes which can result in siderosis. Siderosis is a benign form of lung disease caused by particles deposited in the lungs. Acute symptoms include irritation of the nose and lungs. Tends to clear up when exposure stops.

Overexposure to manganese fumes may affect the brain and central nervous system, resulting in poor coordination, difficulty in speaking and arm or leg tremor. This condition can be irreversible. Manganese fumes can cause "Metal Fume Fever". Chronic effects may include central nervous system problems as well as ototoxicity which may result in hearing loss.

Fluoride fume causes irritation of the eyes, nose and throat. Long-term exposures may result in bone and joint problems. Chronic effects also include excess fluid in the lungs.

Crystalline silica (Quartz) is listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Nickel fume causes irritation of the eyes, nose and throat. Increased cancer risk has been noted in occupations other than welding. Also associated with dermatitis and lung problems.

Molybdenum cause eye, nose and throat irritation, and shortness of breath.

Aluminium fume is a respiratory irritant.

Copper can cause irritation of the eyes, nose and throat, nausea and "Metal Fume Fever."

This product contains Ototoxic substances. Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

Organic polymers may be used in the manufacture of various welding consumables. Overexposure to their decomposition by-products may result in a condition known as polymer fume fever. Polymer fume fever usually occurs within 4 to 8 hours of exposure with the presentation of flu like symptoms, including mild pulmonary irritation with or without an increase in body temperature. Signs of exposure can include an increase in white blood cell count. Resolution of symptoms typically occurs quickly usually not lasting longer than 48 hours.

Section 12 - Ecological Information

Ecotoxicity

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner.

Disposal of this product may be regulated as a Hazardous Waste. The welding consumable and/or by-product from the welding process (including, but not limited to slag, dust, etc.) may contain levels of leachable heavy metals such as Barium or Chromium.

To minimise personal exposure to the chemical, refer to Section 8—Exposure controls and personal protection.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG Code):

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN Number

None Allocated

Proper Shipping Name

None Allocated

Transport Hazard Class

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Not Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S5

Montreal Protocol

Not list

Stockholm Convention

Not list

Rotterdam Convention

Not list

International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

Agricultural and Veterinary Chemicals Act 1994

Not applicable

Basel Convention

Not available

Section 16 - Any Other Relevant Information

Date of Preparation

SDS amendment: May 2024

Section 8 - Exposure Controls and Personal Protection

SDS Reviewed: March 2022 Supersedes: January 2017

Version Number

Version 2.1

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point

(02) 9772 7240

END OF SDS

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Product Name: ULTRAFIL R690M
Issue Date: 05/03/2022