SAFETY DATA SHEET
NITOFILL UR63 BASE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name NITOFILL UR63 BASE

Product number A1808002AE1

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

Identified uses Base component of flexible polyurethane injection system

1.3. Details of the supplier of the safety data sheet

Supplier

Al Gurg Fosroc LLC
PO Box 657
Dubai
United Arab Emirates
+ 971 4 2858606

1.4. Emergency telephone number

Emergency telephone +97142039699 (08:00 to 16:30) // +971506258232 (16:30 to 08:00)GMT+4

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302

Environmental hazards Not Classified

Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard pictograms

Signal word Warning

Hazard statements H302 Harmful if swallowed.

Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P330 Rinse mouth.
P501 Dispose of contents/ container in accordance with national regulations.

NITOFILL UR63 BASE

Contains Polymer of glycerol and propylene oxide, Polypropylene glycol, TRIETHYL ORTHOFORMATE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Polymer of glycerol and propylene oxide **60-100%**

CAS number: 25791-96-2

Classification
Acute Tox. 4 - H302

Polypropylene glycol **10-30%**

CAS number: 25322-69-4

Classification
Acute Tox. 4 - H302

TRIETHYL ORTHOFORMATE **1-5%**

CAS number: 122-51-0 EC number: 204-550-4

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information Get medical attention promptly if symptoms occur after washing.

Inhalation May cause discomfort.

NITOFILL UR63 BASE

Ingestion Harmful if swallowed.

Skin contact May cause irritation.

Eye contact May cause irritation.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Wear personal protective clothing and equipment, see Section 8.

6.2. Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Provide adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

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

Occupational exposure limits

No occupational exposure limits known.

NITOFILL UR63 BASE

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye/face protection	The following protection should be worn: Chemical splash goggles.
Hand protection	Wear protective gloves made of the following material: Neoprene. Butyl rubber. Nitrile rubber.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Use an approved air purifying respirator with replaceable filter cartage comply with EN 140and filter EN 141: Organic Vapour cartridge type A1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	Not applicable.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	>200°C @
Flash point	180°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.05 @ 20°C
Bulk density	Not determined.
Solubility(ies)	Insoluble in water.

NITOFILL UR63 BASE

Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No dangerous reactions known if used as directed.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO_2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Inhalation	May cause respiratory system irritation.
Ingestion	Harmful if swallowed.
Skin contact	Irritating to skin.
Eye contact	Irritating to eyes.

Toxicological information on ingredients.

Polymer of glycerol and propylene oxide

Acute toxicity - oral

NITOFILL UR63 BASE

Acute toxicity oral (LD_{50} mg/kg)	2,000.0
Species	Rat
ATE oral (mg/kg)	2,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,500.0
Species	Rat
ATE dermal (mg/kg)	2,500.0

Polypropylene glycol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,000.0
Species	Rat
ATE oral (mg/kg)	2,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,500.0
Species	Rat
ATE dermal (mg/kg)	2,500.0

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability Not expected to be readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is insoluble in water and will sediment in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

NITOFILL UR63 BASE

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

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

Road transport notes Not classified.

Rail transport notes Not classified.

Sea transport notes Not classified.

Air transport notes Not classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

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 MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

NITOFILL UR63 BASE

Revision date	10/09/2019
Revision	4
Supersedes date	31/08/2015
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.

SAFETY DATA SHEET
NITOFILL UR63 HARDENER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name NITOFILL UR63 HARDENER

Product number A1808003AE1

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

Identified uses Hardener component of flexible polyurethane injection system

1.3. Details of the supplier of the safety data sheet

Supplier

Al Gurg Fosroc LLC
PO Box 657
Dubai
United Arab Emirates
+ 971 4 2858606

1.4. Emergency telephone number

Emergency telephone +97142039699 (08:00 to 16:30) // +971506258232 (16:30 to 08:00)GMT+4

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373

Environmental hazards Not Classified

Human health May irritate eyes. Prolonged skin contact may cause redness and irritation.

Environmental The product is not expected to be hazardous to the environment.

2.2. Label elements

Hazard pictograms

Signal word Danger

NITOFILL UR63 HARDENER

Hazard statements	H332 Harmful if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	DIPHENYLMETHANE-DIISOCYANATE, ISOMERS & HOMOLOGUES, 4,4'-METHYLENEDIPHENYL DIISOCYANATE
Supplementary precautionary statements	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe vapour/ spray. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P284 [In case of inadequate ventilation] wear respiratory protection. P308+P313 IF exposed or concerned: Get medical advice/ attention. P312 Call a POISON CENTRE/doctor if you feel unwell. P314 Get medical advice/ attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NITOFILL UR63 HARDENER

DIPHENYLMETHANE-DIISOCYANATE, ISOMERS & HOMOLOGUES	60-100%
CAS number: 9016-87-9	EC number: 618-498-9

Classification
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
Carc. 2 - H351
STOT SE 3 - H335
STOT RE 2 - H373

4,4'-METHYLENEDIPHENYL DIISOCYANATE	30-60%
CAS number: 101-68-8	EC number: 202-966-0

Classification
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
Carc. 2 - H351
STOT SE 3 - H335
STOT RE 2 - H373

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information Get medical attention promptly if symptoms occur after washing.

Inhalation Harmful if inhaled. May cause respiratory irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact May cause eye irritation.

NITOFILL UR63 HARDENER

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains and the aquatic environment. If large amounts have been spilled, inform the relevant authorities.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Remove mechanically; cover remainders with wet, absorbent material (e.g.sawdust, chemical binder based on calcium silicate hydrate, sand). After
approx. one hour transfer to waste container and do not seal (evolution of CO2!). Keep damp in a safe ventilated area for several days. Keep damp in a safe ventilated area for several days. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Spill area can de decontaminated with 10% sodium carbonate, 2% detergent solution in water.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

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

Occupational exposure limits

4,4'-METHYLENEDIPHENYL DIISOCYANATE

NITOFILL UR63 HARDENER

Long-term exposure limit (8-hour TWA): 0.02 mg/m³
as -NCO
Sen
Short-term exposure limit (15-minute): 0.07 mg/m³
Sen = Capable of causing occupational asthma.

4,4'-METHYLENEDIPHENYL DIISOCYANATE (CAS: 101-68-8)

DNEL	Industrial - Dermal; Acute systemic effects: 50 mg/kg Industrial - Inhalative; Acute local effects: 0.1 mg/m³ Industrial - Inhalative; Long term local effects: 0.05 mg/m³ Industrial - Inhalative; Acute systemic effects: 0.1 mg/m³ Industrial - Dermal; Acute local effects: 28.7 mg/cm² Industrial - Inhalative; Long term systemic effects: 0.05 mg/m³
PNEC	- STP; 1 mg/l - Soil; 1 mg/kg - marine water; 0.1 mg/l - Fresh water; 1 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection may be required if excessive airborne contamination occurs. Use an approved air purifying respirator with replaceable filter cartage comply with EN 140and filter EN 141: Organic Vapour cartridge type A1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Odour	Characteristic odour
Odour threshold	Not determined.

NITOFILL UR63 HARDENER

pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	>200°C @
Flash point	230°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not applicable.
Vapour pressure	2.3 kPa(water)
Vapour density	Not determined.
Relative density	1.256 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Water Alcohols. Amines.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Hazardous polymerization will not occur.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid	Water, moisture. Alcohols. Amines. Strong acids.

10.6. Hazardous decomposition products

NITOFILL UR63 HARDENER

Hazardous decomposition products	Fire creates: Oxides of nitrogen. Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	1.5

Carcinogenicity

Carcinogenicity	Suspected of causing cancer.

Inhalation	Harmful by inhalation. Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged and frequent contact may cause redness and irritation.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Route of exposure	Inhalation Dermal
Target organs	Lungs Eyes Skin

Toxicological information on ingredients.

DIPHENYLMETHANE-DIISOCYANATE, ISOMERS & HOMOLOGUES

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} > 10,000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} > 9,400 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC_{50})	LC50 0.31 mg/L 4 h, Inhalation, Rat
ATE inhalation (dusts/mists mg/l)	1.5

Skin corrosion/irritation

Skin corrosion/irritation	Slightly irritating.

Specific target organ toxicity - single exposure

STOT - single exposure	Inhalation of vapors may cause Irritation of the respiratory tract
Target organs	Respiratory tract

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Target organs	Respiratory tract

4,4'-METHYLENEDIPHENYL DIISOCYANATE

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} >10000 mg/kg, Oral, Rat LD_{50} 100 mg/kg, Oral, Rabbit

NITOFILL UR63 HARDENER

Acute toxicity - dermal

Notes (dermal LD_{50}) LD_{50} >9400 mg/kg, Dermal, Rabbit (OECD 402)

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Inhalative, Conversion value: 1.5 mg/l/4h (Dust/mist) LC50 0.368 mg/l/4hr, Inhalative, Rat LC50 0.49 mg/l/4hr, Inhalative, (Mist), Rat NOAEL 12 mg/m³, Inhalative, Rat (OECD 403) (OECD 414 Prenatal Development Toxicity study)

ATE inhalation (dusts/mists mg/l) 1.5

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Toxicity Not relevant.

Ecological information on ingredients.

DIPHENYLMETHANE-DIISOCYANATE, ISOMERS & HOMOLOGUES

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: > 1,000 mg/L, Danio rerio

Acute toxicity - aquatic invertebrates EC_{50}, 24 hours: > 1,000 mg/L, Daphnia magna
NOEC, 21 days: > 10 mg/L, Daphnia magna

Acute toxicity - aquatic plants EC50, 72 hours: > 1.64 mg/L, Scenedesmus subspicatus

Acute toxicity - microorganisms EC_{50}, 3 hours: > 100 mg/L, Activated sludge

Acute toxicity - terrestrial NOEC, 14 days: > 1000 mg/kg, Avena Sativa (oats)

4,4'-METHYLENEDIPHENYL DIISOCYANATE

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: >1000 mg/l, Danio rerio
(OECD 203)

Acute toxicity - aquatic plants EC50, 72 hours: >1640 mg/l, Scenedesmus subspicatus
(OECD 201)
EC_{50}, 24 hours: >1000 mg/l, Daphnae
(OECD 202)

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

DIPHENYLMETHANE-DIISOCYANATE, ISOMERS & HOMOLOGUES

Stability (hydrolysis) Hydrolyses rapidly in water.

Biodegradation Not readily biodegradable.

12.3. Bioaccumulative potential

NITOFILL UR63 HARDENER

Bioaccumulative potential Not determined.

Ecological information on ingredients.

4,4'-METHYLENEDIPHENYL DIISOCYANATE

Bioaccumulative potential BCF: 200,

Partition coefficient log Pow: 4.51

12.4. Mobility in soil

Mobility The product reacts with water to form a solid, immobile substance

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations 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)

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 MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

NITOFILL UR63 HARDENER

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 09/09/2019

Revision 4

Supersedes date 25/08/2015

Hazard statements in full
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.