



SAFETY DATA SHEET ONGRONAT XP 1147

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

1.1. Product identifier

Product name ONGRONAT XP 1147

Product number 62512

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

Identified uses Chemicals used in the synthesis and / or formulation of industrial products

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 62512

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

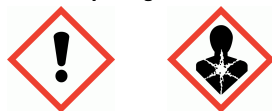
Physical hazards Not Classified

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

2.2. Label elements

Hazard pictograms



Signal word Danger

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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	P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P284 [In case of inadequate ventilation] wear respiratory 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.
Supplemental label information	EUH204 Contains isocyanates. May produce an allergic reaction.
Contains	REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE, POLYMERIC MDI

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

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE		85 - 95%
CAS number: —	EC number: 905-806-4	REACH registration number: 01-2119457015-45-XXXX
Classification Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1B - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373		

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POLYMERIC MDI	5 - 15%
CAS number: 9016-87-9	
Polymer	
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 hazard statements is 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	First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing. In the event of any sensitisation symptoms developing, ensure further exposure is avoided.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

General information	Suspected of causing cancer.
Inhalation	Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled. Symptoms following overexposure may include the following: Headache. Nausea, vomiting. Shortness of breath. Sore throat. Prolonged or repeated exposure may cause the following adverse effects: Asthma, pulmonary sensitisation.
Ingestion	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
Skin contact	May cause skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

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

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Notes for the doctor	No specific recommendations. Treat symptomatically. Development of symptoms may be delayed for 24 to 48 hours. Keep affected person under observation.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Do not use water, if avoidable.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Suspected of causing cancer. When heated, vapours/gases hazardous to health may be formed. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO ₂). Carbon monoxide (CO). Nitrous gases (NO _x). Hydrocarbons. Isocyanates. Hydrogen cyanide (HCN).

5.3. Advice for firefighters

Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water.
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	Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Follow precautions for safe handling described in this safety data sheet. Approach the spillage from upwind. Keep unnecessary and unprotected personnel away from the spillage. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Do not touch or walk into spilled material.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Decontaminate area with: 3 - 8% concentrated ammonia solution, 0.2 - 2% liquid detergent, water to 100% or Decontaminate area with: 5 - 10% sodium carbonate, 0.2 - 2% liquid detergent, water to 100% Clean contaminated objects and areas thoroughly, observing environmental regulations.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Suspected of causing cancer. Handle all packages and containers carefully to minimise spills. Wear protective clothing as described in Section 8 of this safety data sheet. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid inhalation of vapours and contact with skin and eyes.

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Provide eyewash station and safety shower.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a well-ventilated place. Avoid exposure to high temperatures or direct sunlight. Protect from moisture. Container must be kept tightly closed when not in use. Keep away from food, drink and animal feeding stuffs. Suitable container materials: Carbon steel. Stainless steel. Unsuitable container materials: Copper. Store away from the following materials: Acids. Alkalis. Amines. Alcohols. Water Oxidising materials. Store at temperatures between 10°C and 30°C.

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

Ingredient comments

Observe any occupational exposure limits for the product or ingredients.

POLYMERIC MDI (CAS: 9016-87-9)

DNEL

Industry - Dermal; Short term systemic effects: 50 mg/kg/day
 Industry - Inhalation; Short term systemic effects: 0.1 mg/m³
 Industry - Dermal; Short term local effects: 28.7 mg/m³
 Industry - Inhalation; Short term local effects: 0.1 mg/m³
 Industry - Inhalation; Long term systemic effects: 0.05 mg/m³
 Consumer - Dermal; Short term systemic effects: 25 mg/kg/day
 Consumer - Inhalation; Short term systemic effects: 0.05 mg/m³
 Consumer - Oral; Short term systemic effects: 20 mg/kg/day
 Consumer - Dermal; Short term local effects: 17.2 mg/m³

PNEC

- marine water; 0.1 mg/l
 - Fresh water; 1 mg/l
 - Intermittent release; 10 mg/l
 - STP; 1 mg/l
 - Soil; 1 mg/l

8.2. Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Avoid inhalation of vapours and contact with skin and eyes. Provide eyewash station and safety shower.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Butyl rubber. Protective gloves should have a minimum thickness of 0.5 mm. Chlorinated polyethylene (CPE) Polyethylene. Polyethylene/Ethylene Vinyl Alcohol (PE/EVAL). Neoprene. Protective gloves should have a minimum thickness of 0.5 mm. Nitrile rubber. Protective gloves should have a minimum thickness of 0.35 mm.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Wash contaminated clothing before reuse.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Gas and combination filter cartridges should comply with European Standard EN14387. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2. Gas filter, type A2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Odour	No characteristic odour.
Odour threshold	No information available.
pH	No information available.
Melting point	5°C
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	> 300°C Will decompose at temperatures exceeding 300°C.
Flash point	> 200°C Closed cup.
Evaporation rate	No information available.

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Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	< 10 E-5 mbar @ 25°C
Vapour density	No information available.
Relative density	No information available.
Bulk density	No information available.
Solubility(ies)	Reacts strongly with water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	15 - 30 mPa s @ 25°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Water Acids. Alcohols. Amines. Alkalis. Oxidising materials.
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10.2. Chemical stability

Stability	Hydrolysis in water The product hardens to a solid, immobile substance.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reactions with the following materials may cause explosions: Acids. Alcohols. Amines. Alkalis. Oxidising materials. Reacts with water. Contents may develop pressure upon prolonged storage. Carbon dioxide (CO ₂).
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10.4. Conditions to avoid

Conditions to avoid	Will decompose at temperatures exceeding 250°C. Avoid exposure to high temperatures or direct sunlight. Protect from moisture.
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10.5. Incompatible materials

Materials to avoid	Avoid contact with the following materials: Water Acids. Alcohols. Amines. Alkalis. Oxidising materials.
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10.6. Hazardous decomposition products

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Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Hydrocarbons. Isocyanates. Hydrogen cyanide (HCN).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat, Male, Female Read-across data.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 9400 mg/kg, Dermal, Rabbit Read-across data.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Harmful if inhaled.

ATE inhalation (gases ppm) 45,000.0

ATE inhalation (vapours mg/l) 11.0

ATE inhalation (dusts/mists mg/l) 15.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.
Irritating to skin. Rabbit (4h/14d) Read-across data.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Guinea pig: Sensitising. Read-across data.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.
Local Lymph Node Assay (LLNA) - Mouse: Sensitising. Read-across data.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.
Gene mutation: Negative. (Salmonella typhimurium) Read-across data.

Genotoxicity - in vivo This substance has no evidence of mutagenic properties.
Chromosome aberration: Negative. Rat (3w; 1/w, 1h/d) Read-across data.

Carcinogenicity

Carcinogenicity Suspected of causing cancer.
NOAEC 1 mg/m³, Inhalation, Aerosol, Rat (2y; 6h/d, 5d/w) Read-across data.
LOAEC 6 mg/m³, Inhalation, Aerosol, Rat (2y; 6h/d, 5d/w) Read-across data.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.
Maternal toxicity: - NOAEL 4 mg/m³, Inhalation, Rat P (10d; 1/d; 6h) Read-across data.

Reproductive toxicity - development Based on available data the classification criteria are not met.
Developmental toxicity: - NOAEL: 4 mg/m³, Inhalation, Rat (10d; 1/d; 6h) Read-across data.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure if inhaled.
NOAEC 0.2 mg/m³, Inhalation, Aerosol, Rat (2y; 6h/d; 5d/w) Read-across data.
LOAEC 1.0 mg/m³, Inhalation, Aerosol, Rat (2y; 6h/d; 5d/w) Read-across data.

Aspiration hazard

Aspiration hazard No information available.

Inhalation

Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled.
Symptoms following overexposure may include the following: Headache. Nausea, vomiting.
Shortness of breath. Sore throat.
Prolonged or repeated exposure may cause the following adverse effects: Asthma, pulmonary sensitisation.

Ingestion

The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact

Causes skin irritation. May cause an allergic skin reaction.

Eye contact

Causes serious eye irritation.

Acute and chronic health hazards

Suspected of causing cancer.

Toxicological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Acute toxicity - oral

Notes (oral LD₅₀) No specific test data are available.

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Harmful if inhaled.

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

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Genotoxicity - in vivo	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Suspected of causing cancer.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause respiratory irritation.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

POLYMERIC MDI

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	10,000.0
Species	Rat
Notes (oral LD₅₀)	No specific test data are available.
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	9,400.0
Species	Rabbit
Notes (dermal LD₅₀)	LD ₅₀ > 9400 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Harmful if inhaled.
ATE inhalation (gases ppm)	4,500.0
ATE inhalation (vapours mg/l)	11.0
ATE inhalation (dusts/mists mg/l)	1.5
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Causes skin irritation.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation.
<u>Respiratory sensitisation</u>	

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Respiratory sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	Suspected of causing cancer. NOAEC 1.0 mg/m ³ , Inhalation, Rat (2y; 6h/d; 5d/w) LOAEC 6.0 mg/m ³ , Inhalation, Rat (2y; 6h/d; 5d/w)
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Maternal toxicity: - NOAEL 4 mg/m ³ , Inhalation, Aerosol, Rat, Female P (10d; 1/d; 6h) OECD 414
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 4 mg/m ³ , Inhalation, Aerosol, Rat, Female (10d; 1/d; 6h) OECD 414
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause respiratory irritation.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure if inhaled. NOAEC 0.2 mg/m ³ , Inhalation, Aerosol, Rat, Male, Female (2y; 6h/d; 5d/w) OECD 453
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Inhalation</u>	
Inhalation	Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled. Symptoms following overexposure may include the following: Headache. Nausea, vomiting. Shortness of breath. Sore throat. Prolonged or repeated exposure may cause the following adverse effects: Asthma, pulmonary sensitisation.
Ingestion	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Acute and chronic health hazards	Suspected of causing cancer.

SECTION 12: Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
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Ecological information on ingredients.

POLYMERIC MDI

Ecotoxicity

The product components are not classified as environmentally hazardous.
However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: > 1000 mg/l, Brachydanio rerio (Zebra Fish)
Read-across data.

Acute toxicity - aquatic invertebrates

EC₅₀, 24 hour: > 1000 mg/l, Daphnia magna
Read-across data.

Acute toxicity - aquatic plants

EC₅₀, 72 hour: > 1640 mg/l, Desmodemus subspicatus
Read-across data.

Acute toxicity - microorganisms

EC₅₀, 3 hour: > 100 mg/l, Activated sludge

Acute toxicity - terrestrial

LC₅₀, 14 day: > 1000 mg/kg, Eisenia Fetida (Earthworm)
Read-across data.

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

NOEC, 21 day: >= 10 mg/l, Daphnia magna
Read-across data.

Toxicity to terrestrial plants

EC₅₀, 14 day: > 1000 mg/kg,
Avena sativa
Read-across data.
EC₅₀, 14 day: > 1000 mg/kg,
Lactuca sativa
Read-across data.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Toxicity

There are no data on the ecotoxicity of this product.

POLYMERIC MDI

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: > 1000 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 24 hours: > 500 mg/l, Daphnia magna
EC₅₀, 24 hour: > 1000 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 1640 mg/l, Scenedesmus subspicatus
EC₅₀, 72 hour: > 1640 mg/l, Desmodemus subspicatus

Acute toxicity - microorganisms

EC₅₀, 3 hour: > 100 mg/l, Activated sludge

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Acute toxicity - terrestrial LC₅₀, 14 day: > 1000 mg/kg, Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 day: >= 10 mg/l, Daphnia magna

Toxicity to terrestrial plants EC₅₀, 14 day: > 1000 mg/kg,
(Avena sativa)
EC₅₀, 14 day: > 1000 mg/kg,
(Lactuca sativa)

12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

Phototransformation Air - Half-life, DT₅₀ : 1 days
QSAR

Stability (hydrolysis) - Half-life, DT₅₀ : 20 hours @ 25°C
Read-across data.

Biodegradation Water - Degradation 0%: 28 day
OECD 302
Read-across data.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Persistence and degradability The degradability of the product is not known.

POLYMERIC MDI

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation 0%: 28 day
OECD 302

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.
BCF: 200, Cyprinus carpio (Common carp) OECD 305 E Read-across data.

Partition coefficient No information available.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Bioaccumulative potential Bioaccumulation is unlikely.

POLYMERIC MDI

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

12.4. Mobility in soil

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Mobility No information available.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Mobility No specific test data are available.

POLYMERIC MDI

Mobility Reacts strongly with water.

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.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

POLYMERIC MDI

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

REACTION MASS OF 4,4'-METHYLENEDIPHENYL DIISOCYANATE AND O-(P-ISOCYANATOBENZYL)PHENYL ISOCYANATE / METHYLENE DIPHENYL DIISOCYANATE

Other adverse effects No information available.

POLYMERIC MDI

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty. Empty containers or liners may retain some product residues and hence be potentially hazardous. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

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).

ONGRONAT XP 1147**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 Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

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).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

**Restrictions (Annex XVII
Regulation 1907/2006)**

CAUTION - Chemical may be subject to REACH RESTRICTIONS - see Annex XVII. This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

This is the first issue.

Revision date

22/07/2021

Version number

1.000

SDS number

62512

SDS status

Approved.

ONGRONAT XP 1147

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 (Respiratory system) through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.

Signature

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