



SAFETY DATA SHEET CELLANATE M

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name	CELLANATE M
Chemical name	Polymethylene polyphenylene isocyanate
Product number	M
CAS number	9016-87-9

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

Identified uses	Component of a Polyurethane System.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	Huntsman IFS Polyurethanes Ltd. Station Road Roydon King's Lynn Norfolk PE32 1AW United Kingdom Telephone : +44 (0)1485 601155 Fax : +44 (0)1485 601144
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E-mail address of person responsible for the SDS: SDS-records@ifs-group.com

1.4. Emergency telephone number

Emergency telephone: +44 (0)7795 093 276, +44 (0)7592 112 443

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



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Signal word	Danger
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. 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. P308+P313 IF exposed or concerned: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH204 Contains isocyanates. May produce an allergic reaction.
Contains	Isocyanic acid, polymethylenepolyphenylene ester
Supplementary precautionary statements	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. 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. 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. 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

3.1. Substances

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Isocyanic acid, polymethylenepolyphenylene ester	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. 1B - 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.

Product name	CELLANATE M
Chemical name	Polymethylene polyphenylene isocyanate
CAS number	9016-87-9

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	<p>Move out of dangerous area.</p> <p>Do not leave the victim unattended.</p> <p>Get medical attention immediately.</p> <p>Show this Safety Data Sheet to the medical personnel.</p>
Inhalation	<p>IF INHALED: Move affected person to fresh air at once.</p> <p>Call a physician or poison control centre immediately.</p> <p>Keep affected person warm and at rest.</p> <p>Keep respiratory tract clear.</p> <p>When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.</p> <p>If breathing is irregular or stopped, administer artificial respiration.</p> <p>If unconscious, place in recovery position and seek medical advice.</p> <p>Consult a physician immediately if symptoms such as shortness of breath or asthma are observed.</p> <p>A hyper-reactive response to even minimal concentrations of diisocyanates may develop in sensitised persons.</p> <p>The exposed person may need to be kept under medical surveillance for 48 hours.</p> <p>LC50 (rat) : ca. 490 mg/m³ (4 hours) : using experimentally produced respirable aerosol having aerodynamic diameter <5 microns.</p>
Ingestion	<p>Gently wipe or rinse the inside of the mouth with water.</p> <p>Do not induce vomiting unless under the direction of medical personnel.</p> <p>Keep respiratory tract clear.</p> <p>Keep at rest.</p> <p>If a person vomits when lying on his back, place him in the recovery position.</p> <p>Never give anything by mouth to an unconscious person.</p> <p>Take victim immediately to hospital.</p> <p>Get medical attention if symptoms are severe or persist.</p>

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Skin contact	<p>In case of contact, immediately flush skin with soap and plenty of water.</p> <p>Take off immediately all contaminated clothing.</p> <p>Wash contaminated clothing before reuse.</p> <p>Thoroughly clean shoes before reuse.</p> <p>Call a physician if irritation develops or persists.</p> <p>An MDI study has demonstrated that a polyglycol-based skin cleanser (such as D-Tam™, PEG-400) or corn oil may be more effective than soap and water.</p>
Eye contact	<p>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.</p> <p>If easy to do, remove contact lens, if worn.</p> <p>Protect unharmed eye.</p> <p>Keep eye wide open while rinsing.</p> <p>If eye irritation persists, consult a specialist.</p>
Protection of first aiders	<p>No action shall be taken involving any personal risk or without suitable training.</p> <p>It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.</p> <p>If potential for exposure exists refer to Section 8 for specific personal protective equipment.</p> <p>First Aid responders should pay attention to self-protection and use the recommended protective clothing.</p>

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

Symptoms	Severe allergic skin reactions, bronchospasm and anaphylactic shock.
Risks	<p>This product is a respiratory irritant and potential respiratory sensitiser: repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation.</p> <p>Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing.</p> <p>The onset of the respiratory symptoms may be delayed for several hours after exposure.</p> <p>A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons.</p>

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

Specific treatments	<p>Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.</p> <p>The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.</p>
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	<p>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p> <p>Use foam, carbon dioxide or dry powder to extinguish.</p>
Unsuitable extinguishing media	Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.

5.2. Special hazards arising from the substance or mixture

Specific hazards	<p>Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>The pressure in sealed containers can increase under the influence of heat.</p> <p>Exposure to decomposition products may be a hazard to health.</p>
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Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of nitrogen. Hydrocarbons. Hydrogen cyanide (HCN). In the event of extreme heat (>500°C), aniline is suspected of being formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.
Specific extinguishing methods	Cool containers/tanks with water spray.
Further information	Standard procedure for chemical fires. Due to reaction with water producing CO ₂ -gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate area. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Keep people away from and upwind of spill/leak. Only qualified personnel equipped with suitable protective equipment may intervene. For additional precautions and advice on safe handling, see section 7. Never return spills in original containers for re-use. Make sure that there is a sufficient amount of neutralizing/absorbent material near the storage area. The danger areas must be delimited and identified using relevant warning and safety signs. Treat recovered material as described in the section "Disposal considerations". For disposal considerations see section 13.
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6.2. Environmental precautions

Environmental precautions	Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
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6.3. Methods and material for containment and cleaning up

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Methods for cleaning up

Small Spillages:

Contain and absorb spillage with sand, earth or other non-combustible material. Transfer to a container for disposal according to local / national regulation (see section 13).

Clean contaminated surface thoroughly.

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Neutralise small spillages with decontaminant.

The compositions of liquid decontaminants are given in Section 16.

Remove and dispose of residues.

Large Spillages:

If the product is in its solid form:

Spilled MDI flakes should be picked up carefully.

The area should be vacuum cleaned to remove remaining dust particles completely.

If the product is in its liquid form:

Absorb spillage with sand or other inert absorbent.

Leave to react for at least 30 minutes.

Shovel into open-top drums for further decontamination.

Wash the spillage area with water.

Test atmosphere for MDI vapour.

Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. The compositions of liquid decontaminants are given in Section 16.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Eye wash facilities and emergency shower must be available when handling this product.

Use only in well-ventilated areas.

For personal protection, see Section 8.

Avoid the formation of mists.

Do not breathe vapour/spray.

Do not breathe dust or mist.

Do not swallow.

Do not get in eyes, on skin, or on clothing.

Avoid exposure - obtain special instructions before use.

Do not eat, drink or smoke when using this product.

Provide sufficient air exchange and/or exhaust in work rooms.

Keep container tightly sealed when not in use.

Open drum carefully as content may be under pressure.

Dispose of rinse water in accordance with local and national regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion

Normal measures for preventive fire protection.

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Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Observe label precautions. Protect from moisture. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

For incompatible materials please refer to Section 10 of this SDS.

Further information on storage stability

Stable under recommended storage conditions.

7.3. Specific end use(s)

Specific end use(s)

No data available.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Isocyanic acid, polymethylenepolyphenylene ester

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Chemical splash goggles.
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.
Please follow all applicable local/national requirements when selecting protective measures for a specific workplace.
Ensure that eyewash stations and safety showers are close to the workstation location.

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Hand protection

Protective gloves should be worn when handling freshly made polyurethane products to avoid contact with trace residual materials which may be hazardous in contact with skin.

Use chemical resistant gloves classified under Standard EN374: protective gloves against chemicals and microorganisms. Examples of glove materials that might provide suitable protection include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol copolymers laminated (EVAL). Neoprene. Nitrile rubber. Polyvinyl chloride (PVC). Viton rubber (fluoro rubber).

When prolonged or frequently repeated contact may occur, a glove with protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN374) is recommended.

When only brief contact is expected, a glove with protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN374) is recommended. Contaminated gloves should be decontaminated and disposed of.

Notice: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all requisite workplace factors such as, but not limited to : other chemicals that may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), as well as instructions/specifications provided by the glove supplier.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Other skin and body protection

Impervious clothing.

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Recommended:

Overall (preferably heavy cotton) or Tyvek-Pro Tech 'C', Tyvek-Pro 'F' disposable coverall.

Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

In emergency, non-routine and unknown exposure situations, including confined space entries, a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied air respirator (SAR) with auxiliary self-contained air supply, should be used.

Protective measures

Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Ensure that eye flushing systems and safety showers are located close to the working place.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Odour	Not known.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.

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Initial boiling point and range	No information available.
Flash point	230°C Closed cup.
Evaporation rate	No information available.
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	No information available.
Vapour density	No information available.
Relative density	1.23
Bulk density	1.23 g/cm ³
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	220 mPa s @ 25°C 260 mPa s @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not known.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reaction with water (moisture) produces CO₂-gas.
Exothermic reaction with materials containing active hydrogen groups.
The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents.
MDI is insoluble in water, and heavier than water and sinks to the bottom but reacts slowly at the interface.
A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

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10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.
Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Materials to avoid Acids.
Amines.
Bases
Metals
Water

10.6. Hazardous decomposition products

Hazardous decomposition products Combustion products may include: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Hydrocarbons. Hydrogen cyanide (HCN). In the event of extreme heat (>500°C), aniline is suspected of being formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Summary Harmful if inhaled.

ATE inhalation (dusts/mists mg/l) 1.5

Skin corrosion/irritation

Summary Causes skin irritation.

Serious eye damage/irritation

Summary Causes serious eye irritation.

Respiratory sensitisation

Summary May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation

Summary May cause an allergic skin reaction.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Summary Suspected of causing cancer.

IARC carcinogenicity

Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

Summary May cause respiratory irritation.

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Target organs	Respiratory system, lungs
<u>Specific target organ toxicity - repeated exposure</u>	
Summary	May cause damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Summary	Based on available data the classification criteria are not met.
General information	
	May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause sensitisation or allergic reactions in sensitive individuals. A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
Eye contact	Irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	Respiratory system, lungs
Medical considerations	Skin disorders and allergies.

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute aquatic toxicity

Summary Based on available data the classification criteria are not met.

Chronic aquatic toxicity

Summary Based on available data the classification criteria are not met.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility No data available.

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

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13.1. Waste treatment methods

Product	Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
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). Commission Regulation (EU) No 2015/830 of 28 May 2015. 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).

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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
REACH - List of substances subject to authorisation (Annex XIV)	Not applicable.
REACH - List of substances subject to restriction (Annex XVII)	Polymeric MDI and MDI prepolymers contain a significant amount of 4,4'-MDI (CAS No. 101-68-8, EC No. 202-966-0) and/or 2,4'-MDI (CAS No. 5873-54-1, EC No. 227-534-9), both of which are listed under Entry 56 of Annex XVII.
Other regulations	Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable. Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	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. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Carc. = Carcinogenicity Eye Irrit. = Eye irritation Resp. Sens. = Respiratory sensitisation Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure
Classification procedures according to Regulation (EC) 1272/2008	Acute Tox. 4 - H332: STOT RE 2 - H373: STOT SE 3 - H335: Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: Resp. Sens. 1 - H334: Skin Sens. 1 - H317: Carc. 2 - H351: : Calculation method.

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Training advice	Only trained personnel should use this material.
Revision date	02/04/2020
Revision	2
Supersedes date	21/08/2019
SDS number	238
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. H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure if inhaled.

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