

Regulation (EC) 453/2010

Document no: 018

Emission Date: October/11

Revision n°: 01 FABRICOL AG 221 CR

I. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

Identification of the mixture: FABRICOL AG 221 CR

Use of the substance/preparation: Cork Industry

Company/undertaking identification:

Fabrires - Produtos Químicos, S.A.

Parque Industrial de Vendas Novas, Rua 4, Lote 13

7080-341 Vendas Novas

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Emergency telephone (Portugal):



II. HAZARDS IDENTIFICATION

Classification of mixture: Harmful.

Label Elements:



Symbols:

Risk Phrases:

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

R40 - Limited evidence of a carcinogenic effect; R42/43 - May cause sensitization by inhalation;

R48/20 - Danger of serious damage to health by prolonged

exposure through inhalation;

Security Phrases:

\$20/21 - When using do not eat, drink or smoke;

S23 - Do not breathe fumes;

\$36/37/39 - Wear suitable protective clothing, gloves and

eye/face protection;

S41 - In case of fire and/or explosion do not breath fumes; S43 - In case of fire, use carbon dioxide (CO_2) , powder

extinguishing agent. Never use water;

S45 - In case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible);

S61 - Avoid release to the environment. Refer to special

instructions/ material safety data sheet;



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III. COMPOSITION/INFORMATION ON INGREDIENTS

Name	Concentration (% p/p)	CAS	CE	Classification	R Phrases
Diphenylmethane diisocyanate (MDI)	< 12 %	26447-40-5	247-714-0 (EINECS) 615-005-00-9 (N.° INDEX)	Xn; Xi	R20; R36/37/38; R40; R42/43; R48/20;

(*) MDI is a mix of the isomers Diphenylmethane-2,2'-diisocyanate (CAS: 2536-05-2; EINECS:219-799-4), Diphenylmethane-2,4'-diisocyanate (CAS: 5873-54-1; EINECS: 227-534-9) and Diphenylmethane-4,4'-diisocyanate (CAS: 101-68-8; EINECS:202-966-0).

The description of the R phrases can be found in Chapter XVI.

IV. FIRST AID MEASURES

Inhalation: Transfer the victim to a place with fresh air. Controlling your breath and when needed conduct oxygentherapy. Provide immediate medical assistance.

Ingestion: In case of ingestion don't induce vomiting. Provide immediate medical assistance **Skin contact:** Take contaminated clothing and rinse immediately with plenty of water and mild soap. Provide medical assistance.

Eye contact: rinse immediately with plenty of water, at least 15 minutes; separate the eyelids with your fingers to ensure a proper wash; Do not forget to remove the lens. If the pain or irritation subsides consult a doctor immediately.

General measures: Provide medical assistance, show the label or packaging if possible. Never leave the poisoned himself.

Recommendations for the doctor: Symptomatic treatment. Treatment of overexposure should be concentrated on controlling the symptoms and the clinical condition of the patient.

V. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, CO2, alcohol-resistant foam.

Extinguishing media which shall not be used for safety reasons: Full water jet.

Protective equipment: Complete clothing protection.

Specific hazards: The smoke from the fire can be toxic.

Special extinguishing media: Evacuate all people away from the fire scene. Use water spray to cool the containers. Take measures to avoid contamination of the environment. Depending on where you take the fire and if conditions permit, do not use water because of the danger of contamination; if necessary, use a sprinkler conscientiously. Fight the fire from a safe place.



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VI. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear suitable protective clothing, gloves and masks for protection with filter for organic vapours. Isolate and demarcate the area of the release, preventing the entry of unnecessary personnel. Eliminate the sources of ignition. Avoid contact or inhalation of the product. Ventilate the enclosed spaces before entering.

Environmental precautions: Prevent entry into the sewers network, water courses and dispersion of the product. Plugging the leaks if the transaction does not involve risks. If the product has entered a watercourse or in the sewers, or have contaminated the soil or vegetation, warn the authorities.

Methods for cleaning up: Wrap with soil, sand or other absorbent and sweep or vacuum to avoid creating dust. Collect the spilled product. Store the waste containment of the spill in tightly closed container suitable for later disposal through properly.

VII. HANDLING AND STORAGE

Handling: Wear appropriate protective clothing to avoid direct contact with the product and respiratory protection masks with filters for organic vapours. Handle in well-ventilated areas and if possible, with forced removal. There should be a good personal hygiene. Do not smoke, drink or eat while handling the product. Wash your hands after handling the product, using a mild soap. Eliminate all possible sources of ignition in the areas of handling and storing the product. Do not handle containers pierced without using appropriate protective equipment. Keep container under heat and humidity and, when not in use, completely closed.

Storage: As delivered, properly sealed and labelled. Store in cool, dry, well-ventilated under the sun, heat and humidity and out of food and drink and out of reach of children. Avoid extreme temperatures: below 15 C or above 25 ° C. Do not store near sources of heat or flames. Ensure fire-fighting measures in the areas of storage.

Specific use(s): The ones permitted on the label.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

MDI TLV-TWA (ACGIH) (8 Hours)
Diphenylmethane-4,4'diisocyanate (NIOSH) 0.005 ppm

Exposure Limit Portuguese Norm NP1796:2007: 0,005 ppm

Exposure controls



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<u>Professional</u>: Do not breathe the vapours. Do not eat, drink or smoke during use. Wear suitable gloves while applying the product. After treatment wash carefully to protect the material and objects contaminated taking special care to wash their gloves inside.

Respiratory protection: Appropriate respiratory device in case of insufficient ventilation.

Filter for short use: A2-P2.

Hand protection: Gloves appropriate to the handling of chemical agents.

Eye protection: Glasses to ensure full protection of the eyes.

Skin protection: Properly working clothes.

Environmental: Avoid spillage. Keep the product under the conditions of storage. Keep

sealed.

IX. PHYSICAL AND CHEMICAL PROPERTIES

1 - General information:

Appearance Transparent liquid

Colour Yellowish Odour Slightly

2 - Important health, safety and environmental information:

pH n.a.
Boiling point n.a.
Flash point n.a.
Flammability n.a.
Explosive properties n.a.
Oxidising properties n.a.
Vapour pressure n.a.

Relative density $1,06 \pm 0,02 \text{ g/cm}^3$

Solubilityn.a.Water solubilityn.a.Partition coefficient: n-octanol/watern.a.

Viscosity $1500 \pm 500 \text{ mPa} \cdot \text{s}$

Vapour density n.a. Evaporation rate n.a.

3 - Other information:

Miscibility,n.a.Fat Solubilityn.a.Conductivityn.a.Melting Pointn.a.Gas Groupn.a.Auto-ignition Temperaturen.a.



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X. STABILITY AND REACTIVITY

Stability: Product stable under normal conditions of use and storage.

Conditions to avoid: Avoid storing in humid conditions, near sources of heat or ignition in conditions of temperatures above 25 C and below 15 C. Keep away from food, drink and water source.

Materials to avoid: Amines, alcohols, bases, acids, water, copper, copper, zinc, tin, aluminum, strong oxidizing agents and initiators of polymerization.

Hazardous decomposition products: No product of decomposition dangerous, if it satisfies the requirements for storage and handling.

XI. TOXICOLOGICAL INFORMATION

Based on available data, the classification criteria are not filed.

Routes of entry: Contact with skin, eyes, ingestion and inhalation.

Acute toxicity studies indicate that MDI is practically non-toxic after a single ingestion; Practically nontoxic after a single contact with the skin. Harmful if swallowed.

Diphenylmethane-4,4'-diisocyanate:

Acute effects

Oral DL_{50} (rat): > 5000 mg/kg

Dermal DL₅₀ (rabbit): > 5000 mg/kgInhalation CL₅₀ (4 h) (rat): 490 mg/m³

Chronic Effects:

Carcinogenic effects: Not demonstrated Reproductive effects: Not demonstrated Mutagenic effects: Not demonstrated

XII. ECOLOGICAL INFORMATION

Information about MDI:

Ecotoxicity:

Diphenylmethane-4,4'-diisocyanate:

Fish CL_{50} acute (96 h): > 1000 mg/l (Leuciscus idus) Aquatic invertebrates CE_{50} acute (48 h): > 1000 mg/l (daphnia magna)

Mobility: non mixable with water, but will react with water to form inert and non-biodegradable solids.

Persistence and degradability: n.a. Results of PBT assessment: n.a. Other adverse effects: n.a.



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XIII DISPOSAL CONSIDERATIONS

Methods of disposal of the substance (surplus): Collect and direct for recovery or elimination through waste management systems properly licensed (hazardous waste), according with paragraph 2 of Article 5 of Decree-Law No. 187/2006.

Waste:

Elimination: Packages must be delivered by the user in the reception centers, according with the procedures referred to in Article 5 of Decree-Law No. 187/2006 of September 19, except for packages referred to in b) of paragraph 1 of that article.

Handling: Sealed and labeled containers. Avoid direct contact with skin.

Provitions: Establishments and firms involved in recovery, disposal, collection or transportation of waste should comply with Directive 91/156/EEC and / or Decree Law 178/2006 regarding waste management, as well as other national or regional provitions in force.

XIV. TRANSPORT INFORMATION

Special precautions: Stable at room temperature during transport. Carry in packages sealed and labeled properly.

Additional information:

Transport by road (ADR 2011):

This product is not classified as hazardous under the rules of the ADR.

Transport by sea (IMDG 2004):

Transport by air (IATA 2003):

XV. REGULATORY INFORMATION

XVI. OTHER INFORMATION

List of Risk Phrases of the substances mentioned in Chapter III:

R20 - Harmful by inhalation;

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

R40 - Limited evidence of a carcinogenic effect;

R42/43 - May cause sensitization by inhalation and skin contact;

R48/20 - Danger of serious damage to health by prolonged exposure through inhalation;

Databases consulted: EINECS: European Inventory of Existing Commercial Substances.

Legislation consulted:



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Directive 91/689/CEE concerning hazardous waste.

Directive 91/156/CEE concerning waste management.

Directive 2001/58/CE concerning the preparation of safety data sheets.

Decree-Law $n.^{\circ}$ 82/2003 of April 23th, concerning classification, packaging and labeling of dangerous to human health or the environment.

Decree-Law 178/2006 concerning waste management.

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)

Regulation (EC) 453/2010 of May 20th amending Regulation (EC) No 1907/2006.

Other publications: -----

Glossary:

CAS: Chemical Abstracts Service

EINECS - European Inventory of Existing

Commercial Substances

TLV-TWA: Threshold Limit Value-Time

Weighted Average

VLE: Exposure Limit Value

 DL_{50} : Median lethal dose

CL50: Median lethal concentration CE50: Median effective concentration

CI50: Concentration that causes 50% inhibition

DT50: Time to 50% loss; half-life

The information provided has been compiled using the best available sources and according to the latest available knowledge and with the legal requirements concerning classification, packaging and labeling of preparations. This does not imply that the information is absolute complete in all cases. It's the user responsibility to assess whether the information in this data sheet meet the security requirements for a specific application other than that indicated. The information provided in the text does not absolve you of compliance with all applicable laws. The use and application of our products are beyond our control and therefore are the responsibility of the buyer.