



Safety Data Sheet dated 16/6/2016, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: ardcoat PU

Trade code: .9870050

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

Recommended use:

Glue to coat for professional systems.

Uses advised against:

No specific exclusion are known

1.3. Details of the supplier of the safety data sheet

Company:

ARD - F.LLI RACCANELLO SPA

Prima strada, 13 Zona Industriale Nord

35129 PADOVA - ITALY

Tel. +390498060000 Fax. +39049773749 (only available during office hours)

Competent person responsible for the safety data sheet:

tecnica@ard-raccanello.it

1.4. Emergency telephone number

Tel. +390498060000 Fax. +39049773749 (only available during office hours)

Centro antiveneni – Ospedale Niguarda – Milano - tel. +390266101029

Centro antiveneni – Policlinico A.Gemelli – Roma - tel. +39063054343

Health and Safety Executive (HSE) Chemicals Regulation Directorate 5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS, tel.: +44 151 951 3317 (from 9.00am to 5.30pm Monday to Friday). Great Britain

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

⚠ Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

⚠ Warning, Acute Tox. 4, Harmful if swallowed.

⚠ Warning, Acute Tox. 4, Harmful if inhaled.

⚠ Warning, Skin Irrit. 2, Causes skin irritation.

⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.

⚠ Danger, Resp. Sens. 1, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.

⚠ Warning, Carc. 2, Suspected of causing cancer.

⚠ Warning, STOT SE 3, May cause respiratory irritation.

⚠ Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H302+H332 Harmful if swallowed or 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:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P280 Wear protective gloves/clothing and eye/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

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+P311 IF exposed or concerned: Call a doctor.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

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Contents

Diphenylmethanediisocyanate, isomers and homologues
tris (2-chloro-1-methylethyl)phosphate 2)

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

The product is not considered as a substance.

Data not available

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

50% - 60% Diphenylmethanediisocyanate, isomers and homologues

CAS: 9016-87-9

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.6/2 Carc. 2 H351

⚠ 3.1/4/Inhal Acute Tox. 4 H332

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.9/2 STOT RE 2 H373

⚠ 3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334

⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

25% - 30% tris (2-chloro-1-methylethyl)phosphate 2)

REACH No.: 01-2119486772-26, CAS: 13674-84-5, EC: 237-158-7

⚠ 3.1/4/Oral Acute Tox. 4 H302

7% - 9% dimethyl ether

REACH No.: 01-2119472128-37, Index number: 603-019-00-8, CAS: 115-10-6, EC: 204-065-8

⚠ 2.2/1 Flam. Gas 1 H220

⚠ 2.5/C Compr. Gas H280

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Wash with plenty of water and soap. If there are sign of a strong irritation or skin damage, seek medical advice.

In case of eyes contact:

Rinse with water with the eyelids open, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION and show him packing or label.

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

Respiratory disorders

Pulmonary oedema

Pulmonary irritation

Nausea

Vomiting

Allergic reactions

Irritation of the eyes and/or skin

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO₂) or dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Direct water jet.

Water in small quantities can be used only for cooling containers near the fire.

5.2. Special hazards arising from the substance or mixture

May produce toxic fumes of carbon monoxide if burning.

Do not inhale explosion and combustion gases.

The propellant gas are usually heavier than air, gather at the lowest points and there is risk of re-ignition or explosion.

5.3. Advice for firefighters

Before approaching the fire, cool containers exposed to fire with water spray. Wear full firefighting equipment.

Use suitable breathing apparatus.

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Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove all sources of ignition.
 - Provide adequate ventilation.
 - Use appropriate respiratory protection.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- 6.3. Methods and material for containment and cleaning up
 - Cover the contaminated area with damp soil or sand and allow at least for 30 minutes for this to take effect. Then remove mechanically. Fresh foam can be cleaned with PU-CLEANER or organic solvents like acetone.
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Use localized ventilation system.
 - Don't use empty container before they have been cleaned.
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
 - Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Cool and adequately ventilated.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - Exposure limit(s):
 - dimethyl ether - CAS: 115-10-6
 - EU - LTE(8h): 1920 mg/m³, 1000 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)
 - DNEL Values:
 - tris (2-chloro-1-methylethyl)phosphate 2) - CAS: 13674-84-5
 - Worker Professional: 22.4 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
 - Worker Professional: 8 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
 - Worker Professional: 5.82 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
 - Worker Professional: 2.08 - Exposure: Human Dermal - Frequency: Long Term, systemic effects
 - PNEC Values:
 - tris (2-chloro-1-methylethyl)phosphate 2) - CAS: 13674-84-5
 - Target: Fresh Water - Value: 13.4 mg/l
 - Target: Marine water - Value: 1.34 mg/l
 - Target: Soil - Value: 1.7 mg/kg
- 8.2. Exposure controls
 - Eye/ face protection:
 - Basket eye glasses.
 - Skin protection
 - a) protection for hands:
 - NBR (nitrile rubber) gloves.
 - FKM (fluoro rubber) gloves.
 - CR (polychloroprene, chloroprene rubber) gloves.
 - b) other:
 - Overall.
 - Respiratory protection:
 - Mask with filter "A" , brown colour
 - Thermal Hazards:
 - None
 - Environmental exposure controls:
 - None
 - Appropriate engineering controls:
 - None

SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties

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Properties	Value	Method:	Notes:
Appearance and colour:	19	--	--
Odour:	Characteristic: acid	--	--
Odour threshold:	Data not available	--	--
pH:	Irrelevant	--	--
Melting point / freezing point:	Data not available	--	--
Initial boiling point and boiling range:	Data not available	--	--
Flash point:	>200°C	DIN 53171	--
Evaporation rate:	Data not available	--	propellant is released, the emerging PU-foam does not evaporate
Solid/gas flammability:	Data not available	--	--
Upper/lower flammability or explosive limits:	max. 16 vol %/ min. 1.5 vol % (gas liquefatto)	--	--
Vapour pressure:	<0.7 MPa- gas liquefatto; <0. 0001 hPa- MDI	--	20°C
Vapour density:	Data not available	--	--
Relative density:	1.055 g/cm ³ con gas propellente	--	1.201g/cm ³ (at 20°C)- without the propulsion gas
Solubility in water:	Insoluble	--	--
Solubility in oil:	Insoluble	--	--
Partition coefficient (n-octanol/ water):	Data not available	--	--
Auto-ignition temperature:	Data not available	--	--
Decomposition temperature:	Data not available	--	--
Viscosity:	Data not available	--	--
Explosive properties:	Data not available	--	--
Oxidizing properties:	Data not available	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Data not available	--	--
Fat Solubility:	Data not available	--	soluble in polar organic solvents before curing
Conductivity:	Data not available	--	--
Substance Groups relevant properties:	Data not available	--	--

Note: The data herein refer to QC when the product was put on the market.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

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- Stable under normal conditions
- 10.3. Possibility of hazardous reactions
Reacts with substances containing active hydrogen, increasing the pressure in closed containers.
Reacts with strong acids and strong oxidizing agents, e.g. hydrogen peroxide, nitric acid..
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
Strong acid, strong oxidizing agents, water.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the mixture:
Data not available
Toxicological information of the main substances found in the mixture:
Data not available
If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:
- a) acute toxicity;
 - b) skin corrosion/irritation;
 - c) serious eye damage/irritation;
 - d) respiratory or skin sensitisation;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Data not available
- 12.2. Persistence and degradability
Diphenylmethanediisocyanate, isomers and homologues - CAS: 9016-87-9
Biodegradability: Non-readily biodegradable - Test: Data not available - Duration: Data not available - %: Data not available - Notes: OECD 302 C
- 12.3. Bioaccumulative potential
Data not available
- 12.4. Mobility in soil
Data not available
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.
Waste should not be disposed of by release to sewers.
Contaminated packaging thinners and cleaning diluents must be landfilled.

SECTION 14: Transport information

- 14.1. UN number
ADR-UN number: UN 1950
- 14.2. UN proper shipping name
ADR-Shipping Name: Aerosols
- 14.3. Transport hazard class(es)
ADR-Class: 2.1 codice classificazione 5F
- 14.4. Packing group
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
- 14.6. Special precautions for user
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Data not available

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
DIR.2004/42/CE. Unsuited
Regulation (EU) No 528/2012 and subsequent amendments.
Dir. 98/24/EC (Risks related to chemical agents at work).
Directive 2000/39/CE (Occupational exposure limit values) and subsequent modifications: 2004/37/CE, 2006/15/CE and 2009/161/UE.
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830

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Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Data not available

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

The ECHA database on registered substances.

ESIS- European chemical Substances Information System.

eChemPortal- the global portal to Information on Chemical Substance.

GESTIS substance database.

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend of acronyms and abbreviations used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EC50: Median effective concentration expected to produce a certain effect in 50% of test organisms

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of notified Chemical Substances

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IC50: Half maximal inhibitory concentration.

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

NOEC: No Observed Effect Concentration

Numero EC: EINECS and ELINCS Number

OEL: Substance with a Union workplace exposure limit.

PBT: Persistent, Bioaccumulative and Toxic substance

PNEC: Predicted No Effect Concentration.

REACH: Regulation (EC) No 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

SVHC: Substances of Very High Concern

TLV: Threshold Limiting Value.

UE: European Union

vPvB: Very Persistent and Very Bioaccumulative