

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

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

#### 1.1 Product identifier

**Trade name** PUR GLA-820**Article number:** 1946

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

No further relevant information available.

**Application of the substance / the mixture** Additive

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**

Remmers GmbH

Bernhard-Remmers-Str. 13  
D-49624 Lönigen / Germany

Tel.: +49(0)5432/83-0

Fax: +49(0)5432/3985

Remmers (UK) Limited  
Unit 4 , Lloyds Court  
Manor Royal, Crawley – West Sussex RH10 9QU  
fon +44 (0) 1293 594 010  
fax +44 (0) 1293 594 037**Information department:**

Product Safety department: Phone: +44 (0) 1293 594 010

Email: sales@remmers.co.ukk

#### 1.4 Emergency telephone number:

National Poisons Information Service (NPIS):

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3	H226 Flammable liquid and vapour.
Eye Dam. 1	H318 Causes serious eye damage.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H336 May cause drowsiness or dizziness.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

**Hazard pictograms**

GHS02 GHS05 GHS07

**Signal word** Danger**Hazard-determining components of labelling:**

bis(3-(trimethoxysilyl)propyl)amine

n-butyl acetate

aliphatische Polyisocyanate

(Contd. on page 2)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 1)

hexamethylene-di-isocyanate

**Hazard statements**

H226 Flammable liquid and vapour.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

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

P260 Do not breathe mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

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.

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.

**2.3 Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

\* **SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions.

Dangerous components [% w/w]:		
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	≥70-≤85%
CAS: 82985-35-1 EINECS: 280-084-5	bis(3-(trimethoxysilyl)propyl)amine Eye Dam. 1, H318; Aquatic Chronic 2, H411	≥10-<20%
	aliphatische Polyisocyanate Skin Sens. 1, H317	≥10-<20%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene-di-isocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Resp. Sens. 1; H334: C ≥ 0.5 % Skin Sens. 1; H317: C ≥ 0.5 %	≥0.1-≤0.25%

**Additional information** For the wording of the listed hazard phrases refer to section 16.\* **SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Take affected persons out of danger area and instruct to lie down.

Take affected persons into the open air.

**After inhalation**

Supply fresh air and call for doctor for safety reasons.

(Contd. on page 3)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 2)

In case of unconsciousness bring patient into stable side position for transport.

**After skin contact** Wash immediately with water and soap and rinse thoroughly.

**After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

**After swallowing**

Rinse out mouth immediately with plenty of water and administer plenty of water in small swallows (diluting effect).

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

In case of prolonged/repeated exposure or in high concentrations:

Headache

Dizziness

nausea

anaesthetic effect

Dazed

Excessive contact with skin, eyes or respiratory system may cause irritation.

**Danger**

Danger by skin resorption.

Long-term or repeated exposure may cause inflammation of the skin (dermatitis).

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

symptomatic treatment

To avoid dermatitis (skin inflammation), use skin cream.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents** Water with a full water jet.

**5.2 Special hazards arising from the substance or mixture**

Thick black smoke forms in fires. Inhalation of dangerous decomposition products may cause serious damage to your health.

Formation of poisonous gases during heating or in fires.

Vapours are heavier than air and spread out over the ground. Ignition over greater distances is possible.

**5.3 Advice for firefighters**

**Protective equipment:**

Do not inhale explosion gases or combustion gases.

Wear full protective suit.

Put on breathing apparatus.

**Additional information**

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources

Ensure adequate ventilation

Put on breathing apparatus.

Wear protective equipment. Keep unprotected persons away.

**6.2 Environmental precautions:**

Do not allow to enter the ground/soil.

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

**6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 3)

See Section 13 for information on disposal.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

### Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep breathing equipment ready.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

**Requirements to be met by storerooms and containers:** No special requirements.

#### Information on storage in a common storage facility:

Do not store together with fire promoting and self-igniting materials

#### Further information about storage conditions:

Store container in a well ventilated position.

Keep container tightly closed.

## \* SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

<b>Components with limit values that require monitoring at the workplace:</b>	
<b>CAS: 123-86-4 n-butyl acetate</b>	
WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
<b>CAS: 822-06-0 hexamethylene-di-isocyanate</b>	
WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
<b>Ingredients with biological limit values:</b>	
<b>CAS: 822-06-0 hexamethylene-di-isocyanate</b>	
BMGV	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine

**Additional information:** The lists that were valid during compilation were used as a basis.

### 8.2 Exposure controls

**Appropriate engineering controls** Use only in well-ventilated areas.**Individual protection measures, such as personal protective equipment**

#### General protective and hygienic measures

Do not eat, drink or smoke while working.

Use skin protection cream for preventive skin protection.

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Do not inhale gases / vapours / aerosols.

Avoid contact with eyes and skin.

The following indication regarding the personal protective equipment are to be considered as suggestions. The selection of the necessary personal protective equipment is to be evaluated by the employer depending on the types of operations and the local circumstances. If a risk assessment on-site shows that there is no risk for employees, the personal protective equipment is not required or the amount of the PPE can be adapted accordingly.

#### Respiratory equipment:

In case of a risk of inhaling, wear half-mask with combination filter for organic vapours and particles.

Short term filter device:

(Contd. on page 5)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

**Trade name PUR GLA-820**

(Contd. of page 4)

Filter AX/P2

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

**Hand protection**

Solvent resistant gloves

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection** Tightly sealed safety glasses.**Body protection:** Protective work clothing.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties****General Information****Physical state**

Fluid

**Colour:**

Clear

**Odour:**

Solvent-like

**Odour threshold:**

Not determined.

**Melting point/freezing point:**

Not determined

**Boiling point or initial boiling point and boiling range**

Not determined

**Flammability**

Flammable.

**Lower and upper explosion limit****Lower:**

3.0 Vol %

**Upper:**

10.4 Vol %

**Flash point:**

25 °C

**Ignition temperature:**

370 °C

**Decomposition temperature:**

Not determined.

**pH**

Not determined.

**Viscosity:****Kinematic viscosity at 20 °C**

14 s (DIN 53211/4)

**dynamic:**

Not determined.

**Solubility****Water:**

Not miscible or difficult to mix

**Partition coefficient n-octanol/water (log value)**

Not determined.

**Vapour pressure at 20 °C:**

13 hPa

**Density and/or relative density****Density at 20 °C:**0.94 g/cm<sup>3</sup>**Relative density**

Not determined.

**Vapour density**

Not determined.

**9.2 Other information****Appearance:****Form:**

Liquid

(Contd. on page 6)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 5)

<b>Important information on protection of health and environment, and on safety.</b>	
<b>Explosive properties:</b>	Product is not explosive. However, formation of dangerous explosive vapour/air mixtures is possible.
<b>Solvent separation test</b>	< 3 %
<b>Change in condition</b>	
<b>Evaporation rate</b>	Not determined.
<b>Information with regard to physical hazard classes</b>	
<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	Flammable liquid and vapour.
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void
<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.

### 10.2 Chemical stability

#### Thermal decomposition / conditions to be avoided:

No decomposition if handled and stored according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known

## \* SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity:** Based on available data, the classification criteria are not met.

#### LD/LC50 values that are relevant for classification:

Oral	LD50	4,700 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>21 mg/l (rat)

#### CAS: 123-86-4 n-butyl acetate

Oral	LD50	14,000 mg/kg (rat)
Inhalative	LC50/4 h	>21 mg/l (rat)

#### Skin corrosion/irritation:

May cause irritation.

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

**Serious eye damage/irritation:** Causes serious eye damage.

**Sensitisation:** May cause an allergic skin reaction.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

**Carcinogenicity:** Based on available data, the classification criteria are not met.

(Contd. on page 7)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 6)

**Reproductive toxicity:** Based on available data, the classification criteria are not met.

**STOT-single exposure:** May cause drowsiness or dizziness.

**STOT-repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**Additional toxicological information:**

Inhalation of solvent constituents above the TLV-limit value may lead to health damage such as irritation of mucous membranes and respiratory organs as well as impairment of the central nervous system.

Solvent splashes may have an irritating effect on eyes and cause reversible damage.

Prolonged or repeated contact with the product impairs natural oiling of the skin and leads to dry skin.

The product can be absorbed by the body through the skin.

**11.2 Information on other hazards**

<b>Endocrine disrupting properties</b>
None of the ingredients is listed.

\* **SECTION 12: Ecological information**

**12.1 Toxicity**

**Aquatic toxicity:** No further relevant information available.

**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

**12.5 Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects**

**Remark:** Harmful to fish

**Additional ecological information:**

**General notes:**

Do not allow undiluted or non-neutralised product to reach the sewage system or receiving waters.

Do not allow product to reach ground water, bodies of water or sewage system.

Hazardous to drinking water even if small quantities leak into soil.

Harmful to aquatic organisms

**SECTION 13: Disposal considerations**

**Recommendation**

Not hardened material must be disposed of as hazardous waste according to official regulations.

Hardened product remains may be disposed of as building rubble or put into household garbage.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

Do not dispose of together with household garbage. Do not allow product to reach sewage system.

<b>European waste catalogue</b>
07 07 04*   other organic solvents, washing liquids and mother liquors

**Uncleaned packaging:**

**Recommendation:**

Disposal must be made according to official regulations.

Packaging can be reused or recycled after cleaning.

**SECTION 14: Transport information**

<b>14.1 UN number or ID number</b>	
<b>ADR, IMDG, IATA</b>	UN1123
<b>14.2 UN proper shipping name</b>	
<b>ADR</b>	1123 BUTYL ACETATES
<b>IMDG, IATA</b>	BUTYL ACETATES

(Contd. on page 8)

# Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 7)

<b>14.3 Transport hazard class(es)</b>	
<b>ADR</b>	
	
<b>Class</b>	3 (F1) Flammable liquids.
<b>Label</b>	3
<hr/>	
<b>IMDG, IATA</b>	
	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3
<b>14.4 Packing group</b>	
<b>ADR, IMDG, IATA</b>	III
<b>14.5 Environmental hazards:</b>	
<b>Marine pollutant:</b>	- No
<b>14.6 Special precautions for user</b>	
<b>hazard identification number:</b>	Warning: Flammable liquids. 30
<b>EMS Number:</b>	F-E,S-D
<b>Stowage Category</b>	A
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	
	Not applicable.
<b>Transport/Additional information:</b>	
<hr/>	
<b>ADR</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>Transport category</b>	3
<b>Tunnel restriction code</b>	D/E
<hr/>	
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 1123 BUTYL ACETATES, 3, III

## \* SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 74

(Contd. on page 9)



# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 4 (replaces version 3)

Revision: 07.12.2022

Trade name **PUR GLA-820**

(Contd. of page 8)

<b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b>
---

None of the ingredients is listed.
------------------------------------

<b>REGULATION (EU) 2019/1148</b>
----------------------------------

<b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b>
---

None of the ingredients is listed.
------------------------------------

<b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>
--

None of the ingredients is listed.
------------------------------------

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

<b>SECTION 16: Other information</b>
--------------------------------------

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

**Relevant phrases**

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H319 Causes serious eye irritation.  
 H330 Fatal if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H411 Toxic to aquatic life with long lasting effects.  
 EUH066 Repeated exposure may cause skin dryness or cracking.  
 EUH204 Contains isocyanates. May produce an allergic reaction.

**Classification according to Regulation (EC) No 1272/2008** Calculation method

**Department issuing data specification sheet:** Product Safety department / EHS

**Date of previous version:** 06.07.2016

**Version number of previous version:** 3

**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Flam. Liq. 3: Flammable liquids – Category 3  
 Acute Tox. 2: Acute toxicity – Category 2  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Resp. Sens. 1: Respiratory sensitisation – Category 1  
 Skin Sens. 1: Skin sensitisation – Category 1  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2  
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3