

# SAFETY DATA SHEET

## ARMOURGARD

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

#### 1.1. Product identifier

Product name                      ARMOURGARD

Internal identification            L5374

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

Identified uses                    Polish.

Uses advised against            Use only for intended applications.

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

Supplier                            GARDX INTERNATIONAL LTD  
UNIT 7 CLOVELLY BUSINESS PARK  
CLOVELLY ROAD  
SOUTHBOURNE, EMSWORTH  
HANTS  
PO10 8PE  
+44 (0)1243 376426  
product@gardx.co.uk

#### 1.4. Emergency telephone number

Emergency telephone            (24 hrs) +44 (0) 777 8505 330

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

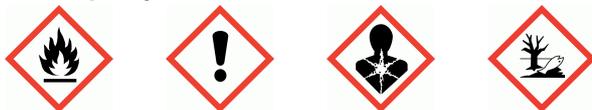
Physical hazards                    Flam. Liq. 3 - H226

Health hazards                    STOT SE 3 - H336 STOT RE 1 - H372

Environmental hazards            Aquatic Chronic 2 - H411

#### 2.2. Label elements

##### Hazard pictograms



Signal word                            Danger

Hazard statements                    EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.  
H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

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**Precautionary statements**

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

P260 Do not breathe vapour/ spray.

P273 Avoid release to the environment.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

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

P280 Wear protective gloves.

**Supplemental label information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**Contains**

Naphtha (petroleum), hydrodesulfurized heavy

### 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

<b>Naphtha (petroleum), hydrodesulfurized heavy</b>			<b>10-30%</b>
CAS number: 64742-82-1	EC number: 919-446-0	REACH registration number: 01-2119458049-33-XXXX	
<b>Classification</b>			
Flam. Liq. 3 - H226			
STOT SE 3 - H336			
STOT RE 1 - H372			
Asp. Tox. 1 - H304			
Aquatic Chronic 2 - H411			
<b>ALUMINIUM HYDROXIDE</b>			<b>1-5%</b>
CAS number: 21645-51-2	EC number: 244-492-7	REACH registration number: 01-2119529246-39-XXXX	
<b>Classification</b>			
Not Classified			
<b>ALUMINIUM SILICATE</b>			<b>1-5%</b>
CAS number: 1332-58-7	EC number: 310-194-1		
<b>Classification</b>			
Not Classified			

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<b>3-iodo-2-propynylbutylcarbamate</b> <span style="float: right;"><b>&lt;1%</b></span> CAS number: 55406-53-6                      EC number: 259-627-5 M factor (Acute) = 10
<b>Classification</b> Acute Tox. 3 - H301 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335 Aquatic Acute 1 - H400
<b>METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6</b> <span style="float: right;"><b>&lt;1%</b></span> CAS number: 55965-84-9 M factor (Acute) = 100                      M factor (Chronic) = 100
<b>Classification</b> Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1A - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
<b>Skin contact</b>	Wash skin thoroughly with soap and water.
<b>Eye contact</b>	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 if irritation persists after washing.

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

<b>Inhalation</b>	May cause drowsiness or dizziness.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	May cause discomfort.

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

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Notes for the doctor                      Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**    Extinguish with the following media: Foam, carbon dioxide or dry powder.

**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**                      Flammable liquid and vapour.

**Hazardous combustion products**    Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### 5.3. Advice for firefighters

**Protective actions during firefighting**    Containers close to fire should be removed or cooled with water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

### 6.2. Environmental precautions

**Environmental precautions**    Toxic to aquatic life with long lasting effects. Do not discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up**                      Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Provide adequate ventilation. Contain and absorb spillage with sand, earth or other non-combustible material. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

**Reference to other sections**    Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions**                      Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapours. Do not eat, drink or smoke when using this product. Do not reuse empty containers. Do not empty into drains. Wash skin thoroughly after handling.

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

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**Storage precautions** Store at temperatures between 4°C and 40°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Storage class** Flammable liquid storage.

### 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

#### Occupational exposure limits

##### **Naphtha (petroleum), hydrodesulfurized heavy**

Long-term exposure limit (8-hour TWA): WEL 350 mg/m<sup>3</sup>

##### **ALUMINIUM HYDROXIDE**

Long-term exposure limit (8-hour TWA): 8 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): 4 mg/m<sup>3</sup> respirable dust

##### **ALUMINIUM SILICATE**

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

WEL = Workplace Exposure Limit

#### **Naphtha (petroleum), hydrodesulfurized heavy (CAS: 64742-82-1)**

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 330 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 44 mg/kg/day Consumer - Inhalation; Long term systemic effects: 71 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Oral; Long term systemic effects: 26 mg/kg/day
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#### **ALUMINIUM HYDROXIDE (CAS: 21645-51-2)**

<b>DNEL</b>	Workers - Inhalation; Long term local effects: 3.0 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 6.85 mg/kg/day
<b>PNEC</b>	STP; 20 mg/l

### 8.2. Exposure controls

#### Protective equipment



#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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### Hand protection

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. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. Protective gloves should have a minimum thickness of 0.15 mm. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Neoprene.

### Hygiene measures

Wash hands thoroughly after handling.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Creamy liquid.
Colour	Light (or pale). Yellow.
Odour	Pleasant, agreeable.
pH	Not applicable.
Flash point	40°C Setaflash closed cup.
Relative density	0.955 @ 25°C
Solubility(ies)	Insoluble in water.
Viscosity	25000 cP @ 25°C

### 9.2. Other information

Other information	Not determined.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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### 10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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### 10.5. Incompatible materials

Materials to avoid	Keep away from flammable and combustible materials.
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### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances:  
Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Inhalation** May cause drowsiness or dizziness.  
**Ingestion** May cause discomfort if swallowed.  
**Skin contact** Repeated exposure may cause skin dryness or cracking.  
**Eye contact** May cause discomfort.

### Toxicological information on ingredients.

#### Naphtha (petroleum), hydrodesulfurized heavy

##### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL 1056 mg/kg, Oral, Rat

**Target organs** Central nervous system

#### ALUMINIUM HYDROXIDE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 2,000.01

**Species** Rat

**ATE oral (mg/kg)** 2,000.01

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)** 7.6

**Species** Rat

**ATE inhalation (dusts/mists mg/l)** 7.6

#### 3-IODO-2-PROPYNYLBUTYLCARBAMATE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 300.0

**Species** Rat

**ATE oral (mg/kg)** 300.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 2,000.0

**Species** Rat

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ATE dermal (mg/kg) 2,000.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 11.0

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 53.0

Species Rat

Notes (oral LD<sub>50</sub>) Estimated value.

ATE oral (mg/kg) 53.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

### SECTION 12: Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

**Acute toxicity - fish** Not determined.

Ecological information on ingredients.

Naphtha (petroleum), hydrodesulfurized heavy

Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: <30 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: <22 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: 4.6-10 mg/l, Algae

**Acute toxicity - microorganisms** EC<sub>50</sub>, 48 hours: 43.98 mg/l,

Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 0.097 mg/l, Daphnia magna

ALUMINIUM HYDROXIDE

Acute aquatic toxicity

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<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hour: 10001 mg/l, Fish
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hour: 10001 mg/l, Daphnia magna

### 3-IODO-2-PROPYNYLBUTYLCARBAMATE

#### Acute aquatic toxicity

<b>LE(C)<sub>50</sub></b>	0.01 < L(E)C <sub>50</sub> ≤ 0.1
<b>M factor (Acute)</b>	10

### METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

#### Acute aquatic toxicity

<b>LE(C)<sub>50</sub></b>	0.001 < L(E)C <sub>50</sub> ≤ 0.01
<b>M factor (Acute)</b>	100
<b>Acute toxicity - fish</b>	Estimated value. LC <sub>50</sub> , 96 hours: 13 mg/l, Fish

#### Chronic aquatic toxicity

<b>NOEC</b>	0.0001 < NOEC ≤ 0.001
<b>Degradability</b>	Non-rapidly degradable
<b>M factor (Chronic)</b>	100

### 12.2. Persistence and degradability

**Persistence and degradability** The product is expected to be biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating.

### 12.4. Mobility in soil

**Mobility** The product has poor water-solubility.

### 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** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

## SECTION 14: Transport information

**General** For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

**Special Provisions note**

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### 14.1. UN number

UN No. (ADR/RID)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	FLAMMABLE LIQUID, N.O.S. (petroleum distillate)
Proper shipping name (IMDG)	FLAMMABLE LIQUID, N.O.S. (petroleum distillate)
Proper shipping name (ICAO)	FLAMMABLE LIQUID, N.O.S. (petroleum distillate)

### 14.3. Transport hazard class(es)

ADR/RID class	3
IMDG class	3
ICAO class/division	3

### Transport labels



### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

Tunnel restriction code (D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. 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.

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**Guidance** Workplace Exposure Limits EH40.

## 15.2. Chemical safety assessment

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### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ATE: Acute Toxicity Estimate.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>GHS: Globally Harmonized System.</p> <p>IATA: International Air Transport Association.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</p> <p>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>EC<sub>50</sub>: 50% of maximal Effective Concentration.</p> <p>NOAEL: No Observed Adverse Effect Level.</p> <p>NOEC: No Observed Effect Concentration.</p> <p>UN: United Nations.</p>
<b>Classification abbreviations and acronyms</b>	<p>Acute Tox. = Acute toxicity</p> <p>Aquatic Acute = Hazardous to the aquatic environment (acute)</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p> <p>Asp. Tox. = Aspiration hazard</p> <p>Eye Dam. = Serious eye damage</p> <p>Flam. Liq. = Flammable liquid</p> <p>Skin Corr. = Skin corrosion</p> <p>Skin Sens. = Skin sensitisation</p> <p>STOT RE = Specific target organ toxicity-repeated exposure</p> <p>STOT SE = Specific target organ toxicity-single exposure</p>
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	23/05/2019
<b>Revision</b>	3.6
<b>Supersedes date</b>	13/03/2019
<b>SDS number</b>	25565

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### Hazard statements in full

H226 Flammable liquid and vapour.  
H301 Toxic if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H311 Toxic in contact with skin.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.

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.