

According to Regulation (EC) No 1907/2006

# SHIELDX ALL-IN-1-SEMI MATT

Version number: 3  
Issued: 2024-01-18  
Replaces SDS: 2020-09-08



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

### 1.1. Product identifier

**Trade name**

SHIELDX ALL-IN-1-SEMI MATT

**UFI code**

S080-X0KN-C004-AUD4

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

**Product type**

Paints and varnishes

**Relevant identified uses**

Water-bourne high performance coating that can be used on a multitude of surfaces without the need for a primer in most situations.

**Not suitable for use in**

Any other Purpose

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

**Manufacturer**

Castle Paints Ltd

Address

Cloncollig Ind Estate

R35X993 Tullamore

Ireland

Telephone

0579351583

Email

info@castlepaints.ie

**Email**

info@castlepaints.ie

### 1.4. Emergency telephone number

**Poison center/Additional emergency number**

+353 1 809 2566 - National Poisons Information Centre

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Supplemental hazard statements**

EUH211

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## 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

### Signal word

Warning

### Supplemental hazard statements

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

### Precautionary statements

P102 Keep out of reach of children.

P233 Keep container tightly closed.

P501.1 Dispose of contents/container to recycling centre in accordance with all local and national regulations.

P262 Do not get in eyes, on skin, or on clothing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.

## 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Titanium dioxide	13463-67-7 236-675-5 - -	0 - 25%	-	- - -	-
1-butylpyrrolidin-2-one	3470-98-2 222-437-8 01-2120062728-48 -	<0.25%	Acute Tox. 4 - oral, Skin Irrit. 2, Eye Irrit. 2	H302, H315, H319 - -	-
2-aminoethanol	141-43-5 205-483-3 01-2119486455-28 603-030-00-8	0 - <0.25%	Acute Tox. 4 - oral, Acute Tox. 4 - dermal, Skin Corr. 1B, Acute Tox. 4 - inhala- tion, STOT SE 3 - resp. tract irrit.	H302, H312, H314, H332, H335 - -	(C >= 5) STOT SE 3, H335

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

GENERAL INFORMATION; Provide General first aid, rest and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless of how minor they seem. First aid personnel must be aware of own risk during rescue.

#### Inhalation

INHALATION; Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort or breathing difficulties develop.

#### Skin contact

SKIN CONTACT; Remove affected person from source of contamination. Remove contaminated clothing and shoes and wash before reuse. Wash exposed area with soap and water. Get medical attention if irritation develops.

#### Eye contact

EYE CONTACT; Avoid Contamination of unaffected eye. Remove contact lenses if present and easy to do so. Hold eye lids open. Rinse with a gentle stream of water for at least 15 minutes. Seek medical attention.

#### Ingestion

INGESTION; If this product is ingested, remove victim immediately from source of exposure. Provide fresh air, warmth and rest preferably in comfortable upright sitting position. Never give anything by mouth to an unconscious person. Rinse mouth out and drink plenty of water. Do not induce vomiting. Seek medical advise (provide label where possible)

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

#### Inhalation

May cause respiratory irritation.

#### Skin contact

May cause skin irritation.

#### Eye contact

May cause eye irritation.

#### Ingestion

IF SWALLOWED: Get medical help.

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

IF exposed or concerned, get medical advice.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide Extinguishing powder Water mist Foam

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## Unsuitable extinguishing media

none

### 5.2. Special hazards arising from the substance or mixture

Do not allow run-off from fire-fighting to enter drains or water courses. When heated, vapours/gases hazardous to health may be formed. Combustion products may include but are not limited to: Oxides of Carbon. Nitrogen oxides (NOx).

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from a safe distance or protected location. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water if safe to do so. Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

Wear protective clothing as described in section 8 of this safety data sheet. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection. Eliminate all sources of ignition. Keep unnecessary and unprotected personnel from entering.

Follow safe handling advice and personal protective equipment recommendations for normal use of product.

### 6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Protection Agency or other appropriate regulatory body.

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

Wear appropriate personal protective equipment as specified in section 8. Ventilate and evacuate the area. Eliminate all ignition sources. Stop leak if possible without risk. Cover drains. Absorb spillage with non-combustible absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitable labelled container. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

Section 13: Disposal Considerations (non-mandatory) Section 8: Exposure Controls/Personal Protection

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Preventive handling precautions

Read and follow manufacturers recommendations. Avoid inhalation of vapours and contact with skin and eyes. Do not eat, drink or smoke when using the product. Ensure adequate ventilation. Use proper personal protection when handling (refer to Section 8). Do not use contact lenses.

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

Take care when re-opening already used containers. Always close containers tightly after the removal of product. Store in tightly closed original container in a cool, dry and well-ventilated place. Keep upright, locked up and out of reach of children. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep away from incompatible materials (see section 10).

### 7.3. Specific end use(s)

No data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m <sup>3</sup>	Source	Remark	Year
Titanium Dioxide	13463-67-7 236-675-5	- 10	-	Total Inhalable Dust	-
Titanium Dioxide	13463-67-7 236-675-5	- 4	-	Respirable Dust	-

#### DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Chronic (long term) Inhalation	24.1 mg/m <sup>3</sup>	Workers	Systemic
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Chronic (long term) Dermal	10 mg/kg bw/day	Workers	Systemic
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Chronic (long term) Inhalation	4.29 mg/m <sup>3</sup>	Consumers	Systemic
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Chronic (long term) Dermal	5 mg/kg bw/day	Consumers	Systemic
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Chronic (long term) Oral	4 mg/kg bw/day	Consumers	Systemic

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Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	DNEL	Acute (short term) Oral	4 mg/kg bw/day	Consumers	Systemic
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Inhalation	1 mg/m <sup>3</sup>	Workers	Systemic
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Inhalation	0.51 mg/m <sup>3</sup>	Workers	Local
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Dermal	3 mg/kg bw/day	Workers	Systemic
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Inhalation	0.18 mg/m <sup>3</sup>	Consumers	Systemic
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Inhalation	0.28 mg/m <sup>3</sup>	Consumers	Local
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Dermal	1.5 mg/kg bw/day	Consumers	Systemic
2-aminoethanol (141-43-5/205-483-3)	DNEL	Chronic (long term) Oral	1.5 mg/kg bw/day	Consumers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Intermittent releases (freshwater)	4 mg/l
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Intermittent releases (marine water)	0.4 mg/l
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Sewage Treatment Plant	30.62 mg/l
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Sediment (freshwater)	20.168 mg/kg sediment dw
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Sediment (marine water)	2.017 mg/kg sediment dw
1-butylpyrrolidin-2-one (3470-98-2/222-437-8)	PNEC	Soil	1.68 mg/kg soil dry weight
2-aminoethanol (141-43-5/205-483-3)	PNEC	Intermittent releases (freshwater)	0.07 mg/l
2-aminoethanol (141-43-5/205-483-3)	PNEC	Intermittent releases (marine water)	0.007 mg/l

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Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
2-aminoethanol (141-43-5/205-483-3)	PNEC	Sewage Treatment Plant	100 mg/l
2-aminoethanol (141-43-5/205-483-3)	PNEC	Sediment (freshwater)	0.357 mg/kg sedi- ment dw
2-aminoethanol (141-43-5/205-483-3)	PNEC	Sediment (marine water)	0.036 mg/kg sedi- ment dw
2-aminoethanol (141-43-5/205-483-3)	PNEC	Soil	1.29 mg/kg soil dry weight

## 8.2. Exposure controls

### Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

### Personal Protective Equipment Symbols



### Eye / face protection

Use safety glasses to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166 (EU). For professional users: Tightly fitting safety goggles or face-shield may be required for applications producing spray or mist.

### Hand protection

Where hand contact with the product may occur the use of gloves approved to the relevant standards (e.g. Europe: EN374) is recommended. Suggested material: Nitrile rubber gloves. Layer thickness: 0.4mm. Breakthrough time: >480 minutes.

### Other skin protection

Wear appropriate clothing to prevent any possibility of skin contact. For professional users: Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. The selected clothing must satisfy the European norm standard EN943.

### Respiratory protection

Use in a well ventilated area. For professional users; where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143, and suitable respirator cartridges as a back up to engineering controls. Suggested filter type: ABEK (EN 14387). Consult manufacturer for specific advise.

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## Other

Hygiene Measures: Wash hands and/or face before breaks and at the end of shift. Do not eat, drink or smoke while using this product. Avoid contact with skin, eyes and clothing. Routinely wash/clean all work clothing and personal protective equipment. Process Conditions: Use only according to directions. Ensure that eye flushing systems and safety showers are located close-by in the work place.

## SECTION 9: Physical and chemical properties

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

#### Physical state

Liquid

#### Colour

Various

#### Odour

Faint Sweet Odour

#### Odour threshold

No information available.

#### Melting point / freezing point

May start to solidify at the following temperature - 0°C, base don the quantity of water present in the product.

#### Boiling point or initial boiling point and boiling range

> 38 °C

#### Flammability

Not Flammable

#### Lower and upper explosion limit

No information available as testing has not been completed.

#### Flash point

No data available

#### Auto-ignition temperature

No information available as testing has not been completed.

#### Decomposition temperature

No information available as testing has not been completed.

#### pH

8.5

#### Kinematic viscosity

No data available



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## Solubility

No information available as testing has not been completed.

## Water solubility

No information available as testing has not been completed.

## Partition coefficient n-octanol/water

No information available as testing has not been completed.

## Vapour pressure

No information available as testing has not been completed.

## Density and/or relative density

1.29

## Relative density

No information available as testing has not been completed.

## Relative vapour density

No information available as testing has not been completed.

## Evaporation Rate

No information available as testing has not been completed.

## Explosive properties

not explosive according to EU A.14

## Oxidising properties

Not oxidising.

## VOC %

< 30 g/l

## **Method**

EU limit for this product Cat A(d) 130g/l. This product contains <130 g/l VOC's.

## Particle characteristics

No data available

## **9.2. Other information**

No data available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Reaction with strong Oxidising Substances and Acids.

### **10.2. Chemical stability**

Stable under recommended storage and handling conditions.

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## 10.3. Possibility of hazardous reactions

No data available

## 10.4. Conditions to avoid

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

## 10.5. Incompatible materials

Strong acid Oxidizing agent Reducing agent Temperature extremes

## 10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

## SECTION 11: Toxicological information

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

No Toxicological information for the overall finished product. Not classified based on available information.

#### Skin corrosion/irritation

Product is not classified as a skin corrosion/irritation hazard.

#### Serious eye damage/irritation

Product is not classified as an eye irritant.

#### Respiratory or skin sensitisation

This product is not classified as a respiratory hazard.

#### Germ cell mutagenicity

This product is not classified as a mutagen.

#### Carcinogenicity

This product is not classified as a carcinogen hazard.

#### Reproductive toxicity

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

#### STOT-single exposure

The product is not classified as a single exposure specific target organ toxin.

#### STOT-repeated exposure

This product is not classified as a repeat exposure specific target organ toxin.

#### Aspiration hazard

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

### 11.2. Information on other hazards

No data available

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## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

No information available as testing has not been completed.

#### Toxicity

No information available as testing has not been completed.

#### Aquatic

No information available as testing has not been completed.

#### Soil

No information available as testing has not been completed.

#### Acute fish toxicity

No information available as testing has not been completed.

#### Acute algae toxicity

No information available as testing has not been completed.

#### Acute crustacean toxicity

No information available as testing has not been completed.

#### Micro-/macro organism toxicity

No information available as testing has not been completed.

#### Chronical toxicity

No information available as testing has not been completed.

### 12.2. Persistence and degradability

#### Persistence and degradability

No information available as testing has not been completed.

#### Decay/transformation

No information available as testing has not been completed.

### 12.3. Bioaccumulative potential

No information available as testing has not been completed.

### 12.4. Mobility in soil

#### Mobility

Product may not be released into water without pre-treatment (biological sewage plant).

### 12.5. Results of PBT and vPvB assessment

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

The product does not contain any substances with endocrine disrupting properties at a concentration above or equal to 0.1%

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## 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal considerations

Dispose of waste and residues in accordance with local authority requirements and in accordance with all local, national and international regulations. For waste disposal, use a licenced industrial waste disposal agent.

#### Packaging

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Since emptied containers contain product residue, follow label warnings even after container is emptied.

## SECTION 14: Transport information

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

#### ADR / RID / ADN proper shipping name

not applicable

### 14.3. Transport hazard class(es)

#### Label

not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## SECTION 15: Regulatory information

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

#### EU regulations

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Safety information according to Regulation (EC) No. 1907/2006 (REACH), Article 32

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## **National regulations**

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019) EH40/2005 Workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations 2002 (as amended). (Fourth Edition, 2020).

## **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

### **Phrase meaning**

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4

Skin Irrit. 2 - Skin irritation, hazard category 2

Eye Irrit. 2 - Eye irritation, hazard category 2

Acute Tox. 4 - dermal - Acute toxicity, dermal, hazard category 4

Skin Corr. 1B - Skin corrosion, hazard category 1B

Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4

STOT SE 3 - resp. tract irrit. - Specific Target Organ Toxicity — Single exposure, hazard category

3 - respiratory tract irritation

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.