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

1.1. Product identifier

Product name
DFense Block SWA (Surface Wetting Agent) Resin

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

Identified uses
Two-component, epoxy-based adhesive.

1.3. Details of the supplier of the safety data sheet

Supplier
ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.com

1.4. Emergency telephone number

Emergency telephone
+44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards
Not Classified

Health hazards
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards
Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram

Signal word
Warning

Hazard statements
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
DFense Block SWA (Surface Wetting Agent) Resin

Precautionary statements

P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

Supplemental label information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains

REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN, Reaction product of Epichlorohydrin & Bisphenol A, EPOXY RESIN (Number average MW <= 700), 1,3-bis(2,3-EPOXYPROPOXY)-2,2-DIMETHYLPROPANE

Supplementary precautionary statements

P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 28064-14-4</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reaction product of Epichlorohydrin &amp; Bisphenol A</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 25085-99-8</td>
<td></td>
</tr>
<tr>
<td>EC number: 500-033-5</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
<td></td>
</tr>
</tbody>
</table>
DFense Block SWA (Surface Wetting Agent) Resin

**EPOXY RESIN (Number average MW <= 700)**

- **CAS number:** 25068-38-6
- **EC number:** 500-033-5
- **REACH registration number:** 01-2119456619-26-0000
- **10-30%**

**Classification**
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319
- Skin Sens. 1 - H317
- Aquatic Chronic 2 - H411

**Elastomer Modified Diglycidyl Ether**

- **CAS number:** 68909-14-8
- **5-10%**

**Classification**
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319
- STOT SE 3 - H335

**1,3-bis(2,3-EPOXYPROPOXY)-2,2-DIMETHYLPROPAINE**

- **CAS number:** 17557-23-2
- **EC number:** 241-536-7
- **5-10%**

**Classification**
- Skin Irrit. 2 - H315
- Skin Sens. 1 - H317

The full text for all hazard statements is displayed in Section 16.

**SECTION 4: First aid measures**

4.1. **Description of first aid measures**

**Inhalation**
Move affected person to fresh air at once. If breathing stops, provide artificial respiration.

**Ingestion**
Do not induce vomiting. Consult a physician for specific advice. Never give anything by mouth to an unconscious person.

**Skin contact**
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

**Eye contact**
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

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

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

**SECTION 5: Firefighting measures**

5.1. **Extinguishing media**

**Suitable extinguishing media**
Extinguish with carbon dioxide or dry powder.

**Unsuitable extinguishing media**
Foam. Water.

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

**Hazardous combustion products**
Does not decompose when used and stored as recommended.
DFense Block SWA (Surface Wetting Agent) Resin

5.3. Advice for firefighters

Protective actions during firefighting
Evacuate area of unprotected personnel. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters
Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions
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
Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. 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.

6.4. Reference to other sections

Reference to other sections
The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions
Provide adequate ventilation. Avoid inhalation of vapours.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Keep container tightly closed. Store in tightly-closed, original container in a dry and cool place. Store away from incompatible materials (see Section 10).

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

EPOXY RESIN (Number average MW <= 700) (CAS: 25068-38-6)

DNEL
Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Short term systemic effects: 12.25 mg/m³

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.
DFense Block SWA (Surface Wetting Agent) Resin

**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: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**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 most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours.

**Other skin and body protection**
Provide eyewash station and safety shower.

**Hygiene measures**
Promptly remove any clothing that becomes wet or contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

**Respiratory protection**
If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter. Gas filter, type A2. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

### SECTION 9: Physical and Chemical Properties

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

**Appearance**
Viscous liquid.

**Odour**
Mild.

**pH**
\( \text{pH (concentrated solution): neutral} \)

**Melting point**
Not determined.

**Initial boiling point and range**
Not determined.

**Flash point**
93.3°C Not specified.

**Evaporation rate**
Not determined.

**Vapour density**
>1

**Relative density**
1.16g/mL

**Auto-ignition temperature**
Not determined.

#### 9.2. Other information

**Volatile organic compound**
This product contains a maximum VOC content of 0 g/litre.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity**
There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability**
Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions
**DFense Block SWA (Surface Wetting Agent) Resin**

Possibility of hazardous reactions

No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid

Avoid heat. Avoid contact with strong oxidising agents. Avoid contact with acids.

10.5. Incompatible materials

Materials to avoid


10.6. Hazardous decomposition products

Hazardous decomposition products

Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects

Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

14.2. UN proper shipping name

Not applicable.
DFense Block SWA (Surface Wetting Agent) Resin

Proper shipping name (ADR/RID)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN);EPOXY RESIN, EPOXY RESIN (Number average MW <= 700 ))

Proper shipping name (IMDG)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN);EPOXY RESIN, EPOXY RESIN (Number average MW <= 700 ))

Proper shipping name (ICAO)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN);EPOXY RESIN, EPOXY RESIN (Number average MW <= 700 ))

Proper shipping name (ADN)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL F-(EPICHLORHYDRIN);EPOXY RESIN, EPOXY RESIN (Number average MW <= 700 ))

14.3. Transport hazard class(es)
ADR/RID class  9
ADR/RID label  9
IMDG class  9
ICAO class/division  9
Transport labels

14.4. Packing group
Not applicable.
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
Not applicable.
EmS  F-A, S-F
Emergency Action Code  •3Z
Hazard Identification Number (ADR/RID)  90
Tunnel restriction code  (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
DFense Block SWA (Surface Wetting Agent) Resin

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

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 03/04/2018
Revision 4
Supersedes date 28/04/2016

Hazard statements in full
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

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.