SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
Product name PHILLYBOND ORANGE SEALANT RESIN
Product No. 3280U

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

1.3. Details of the supplier of the safety data sheet
Supplier ITW Polymers Europe Supplier
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
353(61)471299
353(61)471285
mail@itwpe.com

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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)
Physical and Chemical Hazards Not classified.
Human health Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317
Environment Aquatic Chronic 2 - H411

Classification (1999/45/EEC) Xi; R36/38. R43. N; R51/53.
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements
Contains EPOXY RESIN (Number average MW <= 700 )
PHENOL POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER
Label In Accordance With (EC) No. 1272/2008

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.

Supplementary Precautionary Statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash ... thoroughly after handling.
P272 Avoid contamination of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/attention.
P321 Specific treatment (see ... on this label).
P332+313 If skin irritation occurs: Get medical advice/attention.
P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P337 If eye irritation persists:
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P501 Dispose of contents/container to ...

Supplemental label information
EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards
This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures
PHILLYBOND ORANGE SEALANT RESIN

<table>
<thead>
<tr>
<th>EPOXY RESIN (Number average MW &lt;= 700)</th>
<th>10-30%</th>
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<tbody>
<tr>
<td>CAS-No.: 25068-38-6</td>
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<tr>
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<td>Xi; R36/38</td>
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<tr>
<td>Eye Irrit. 2 - H319</td>
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<tr>
<td>Skin Sens. 1 - H317</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER</th>
<th>10-30%</th>
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<tr>
<td>CAS-No.: 28064-14-4</td>
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<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
<td>R43</td>
</tr>
</tbody>
</table>

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

General information
In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Inhalation
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion
DO NOT INDUCE VOMITING! Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Wash skin thoroughly with soap and water for several minutes. Get medical attention if irritation persists after washing.

Eye contact
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

General information
The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards
Heat may cause the containers to explode. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards
Carbon monoxide (CO). When heated and in case of fire, toxic vapours/gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures
Wear air-supplied mask in confined areas. Water spray should be used to cool containers.

Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

DO NOT TOUCH SPILLED MATERIAL! Eliminate all sources of ignition. Ventilate well.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Absorb with sand or other inert absorbent. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. 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

Avoid contact with skin and eyes. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Contaminated clothing and shoes must be discarded. Provide good ventilation.
PHILLYBOND ORANGE SEALANT RESIN

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

7.3. 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
Ingredient Comments
No exposure limits noted for ingredient(s).

8.2. Exposure controls
Protective equipment

Process conditions
Provide eyewash, quick drench.
Engineering measures
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
Respiratory equipment
Gas cartridge suitable for organic substances.
Hand protection
Do not touch. Chemical resistant gloves required for prolonged or repeated contact.
Eye protection
Wear tight-fitting goggles or face shield.
Hygiene measures
When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Skin protection
Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties
Appearance
Viscous liquid.
Odour
Mild.
Initial boiling point and boiling range (°C)
>149
Melting point (°C)
N/D
Relative density
1.0 - 1.3
Vapour density (air=1)
>1
pH-Value, Conc. Solution
NEUTRAL
Flash point (°C)
148

9.2. Other information
Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No specific reactivity hazards associated with this product.

10.2. Chemical stability
Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions
Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid
Avoid exposure to high temperatures or direct sunlight. Avoid contact with strong oxidisers.

10.5. Incompatible materials
Materials To Avoid

10.6. Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Toxic Dose 1 - LD 50
nd

Inhalation
Unlikely to be hazardous by inhalation because of the low vapour pressure of the substance at ambient temperature.

Ingestion
May cause nausea, headache, dizziness and intoxication. Narcotic effect. Central nervous system depression.
PHILLYBOND ORANGE SEALANT RESIN

Skin contact
This substance is a moderate irritant. May cause sensitisation by skin contact.
Eye contact
May cause severe irritation to eyes.

Toxicological information on ingredients.

**EPOXY RESIN (Number average MW <= 700) (CAS: 25068-38-8)**

- Toxic Dose 1 - LD 50
  >2000 mg/kg (oral rat)
- Toxic Dose 2 - LD 50
  >2000 mg/kg (oral rat)

**SECTION 12: ECOLOGICAL INFORMATION**

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
Acute Fish Toxicity
Very toxic to aquatic organisms.

12.2. Persistence and degradability
Degradability
There are no data on the degradability of this product.

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.

12.4. Mobility in soil
Mobility:
Do not allow to enter drains, sewers or watercourses.

12.5. Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects
Not available.

**SECTION 13: DISPOSAL CONSIDERATIONS**

General information
When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements.

**SECTION 14: TRANSPORT INFORMATION**

14.1. UN number

- UN No. (ADR/RID/ADN) 3082
- UN No. (IMDG) 3082
- UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER, EPOXY RESIN (Number average MW <= 700))

14.3. Transport hazard class(es)

- ADR/RID/ADN Class 9
- ADR/RID/ADN Class: Class 9: Miscellaneous dangerous substances and articles.
- IMDG Class 9
- ICAO Class/Division 9

Transport Labels

14.4. Packing group

- ADR/RID/ADN Packing group III
- IMDG Packing group III
- ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
PHILLYBOND ORANGE SEALANT RESIN

14.6. Special precautions for user

EMS F-A, S-F
Emergency Action Code: 3Z
Hazard No. (ADR) 90
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

UK Regulatory References

EU Legislation

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 25/09/2014
Revision 6
Supersedes date 15/08/2011
Date 10/06/2011

Risk Phrases In Full
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Disclaimer
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.