HEALTH AND SAFETY DATA

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier: Zeroflame Fire Retardant Paint

Relevant identified uses of the substance or mixture and uses advised against: At present there is no complete information available on identified uses. When the data becomes available, it will be integrated into the safety data sheet.

Product use: Fire protection.

Details of the supplier of the safety data sheet:
Company: Decor Ireland, 9 Rathdown Close, Lissie Industrial Estate West, LISBURN, BT28 2RB
Telephone: +44 (0)28 9262 0300
Email: info@decorireland.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Type of product: Mixture

Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements

Labelling according to EC Directives (1999/45/EC)

R-phrase(s): R52/53. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other hazards: This mixture contains no substance considered to be very persistent or very bioaccumulating (vPvB). This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances: Not applicable.

Mixtures:

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>Xn; R20/21/22</td>
<td>Acute Tox. 4; H332</td>
<td>&gt;= 1 - &lt; 2,5</td>
</tr>
<tr>
<td>111-76-2</td>
<td>Xi; R36/38</td>
<td>Acute Tox. 4; H312</td>
<td></td>
</tr>
<tr>
<td>203-905-0</td>
<td></td>
<td>Acute Tox. 4; H302</td>
<td></td>
</tr>
<tr>
<td>01-2119475108-36-XXXX</td>
<td></td>
<td>Eye Irrit. 2; H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2; H315</td>
<td></td>
</tr>
<tr>
<td>Nonylphenol ethoxylate</td>
<td>C; R34</td>
<td>Skin Corr. 1B; H314</td>
<td>&lt; 0,25</td>
</tr>
<tr>
<td>phosphate</td>
<td>N; R51/53</td>
<td>Aquatic Chronic 2; H411</td>
<td></td>
</tr>
<tr>
<td>51609-41-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-(3,4-dichlorophenyl)-1,1-</td>
<td>Carc.Cat.3; R40</td>
<td>Acute Tox. 4; H351</td>
<td>&gt;= 0,025 - &lt; 0,25</td>
</tr>
<tr>
<td>dimethylurea</td>
<td>Xn; R22-R48/22</td>
<td>Acute Tox. 4; H302</td>
<td></td>
</tr>
<tr>
<td>330-54-1</td>
<td>N; R50-R53</td>
<td>STOT RE 2; H373</td>
<td></td>
</tr>
<tr>
<td>206-354-4</td>
<td></td>
<td>Aquatic Acute 1; H400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 1; H410</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of first aid measures

General advice: No hazards which require special first aid measures.

If inhaled: If symptoms persist, call a physician.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed
5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Environmental precautions: Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: For personal protection see section 8. Follow standard hygiene measures when handling chemical products.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

Other data: No decomposition if stored and applied as directed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters*</th>
<th>Basis *</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>TWA</td>
<td>20 ppm 98 mg/m3</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>50 ppm 246 mg/m3</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AGW</td>
<td>10 ppm 49 mg/m3</td>
<td>DE TRGS900</td>
</tr>
</tbody>
</table>

*The above-mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

Exposure controls

Personal protective equipment

Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Organic vapor (Type A) and particulate filter A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm P1: Inert material; P2: Xn; P3: T, T+ Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 – Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.
Hand protection: Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications. Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves (0.4 mm), contaminated gloves should be removed. Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.

Eye protection: Safety glasses with side-shields. Eye wash bottle with pure water.

Skin and body protection: Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental exposure controls
General advice: Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour:</td>
<td>white</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>no data available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 101 °C</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limit (Vo%) :</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit (Vo%) :</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>no data available</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
<td>no data available</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>no data available</td>
</tr>
<tr>
<td>pH:</td>
<td>8.7 at 20 °C</td>
</tr>
<tr>
<td>Melting point/range / Freezing point:</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling point/boiling range:</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>ca.23 hPa at 20 °C</td>
</tr>
<tr>
<td>Density:</td>
<td>ca.1.26 g/cm3 at 20 °C</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>Note: soluble</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>no data available</td>
</tr>
<tr>
<td>n-octanol/water:</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity, dynamic:</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity, kinematic:</td>
<td>ca. &gt; 20,5 mm2/s at 40 °C</td>
</tr>
</tbody>
</table>
density: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical stability
The product is chemically stable.

Possibility of hazardous reactions
Hazardous reactions: Stable under recommended storage conditions. No decomposition if used as directed.
Conditions to avoid: no data available

Incompatible materials
Materials to avoid: no data available

Hazardous decomposition products
Thermal decomposition: no data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute oral toxicity: no data available
Acute inhalation toxicity: no data available
Acute dermal toxicity: no data available
Skin corrosion/irritation: no data available
Serious eye damage/eye irritation: no data available
Respiratory or skin sensitisation: no data available
Mutagenicity: no data available
Carcinogenicity: no data available
Reproductive toxicity: no data available
Teratogenicity: no data available

Components:
2-butoxyethanol:
Acute oral toxicity: Acute toxicity estimate: 500 mg/kg. Converted acute toxicity point estimate.
Acute dermal toxicity: Acute toxicity estimate: 1.100 mg/kg. Converted acute toxicity point estimate.
3-(3,4-dichlorophenyl)-1, 1-dimethylurea: Acute toxicity estimate: 500 mg/kg. Converted acute toxicity point estimate.
12. ECOLOGICAL INFORMATION

Toxicity
Components:
3-(3,4-dichlorophenyl)-1,1-dimethylurea:

M-Factor: 10

Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
Other adverse effects: no data available
Other adverse effects: no data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal considerations: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product should at all times comply with the requirements of environmental protection and waste disposal legislation and any other regional local authority requirements. The classification of the product may meet the criteria for hazardous waste.

14. TRANSPORT INFORMATION

ADR: Not dangerous goods
IATA: Not dangerous goods
IMDG: Not dangerous goods

Special precautions for user: No data available
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

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

Candidate List of Substances of Very High Concern for Authorisation: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH Information: This product is preregistered or registered by our upstream suppliers, and/or preregistered or registered by the manufacturer, and/or excluded from the regulation, and/or exempted from the registration

VOC-CH (VOCV): 1.9 % no VOC duties
VOC-EU (solvent): 1.9 %

Issue Date 01/10/14
Chemical Safety Assessment
This product contains substances for which Chemical Safety Assessments are still required.

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R22 Harmful if swallowed.
R34 Causes burns.
R36/38 Irritating to eyes and skin.
R40 Limited evidence of a carcinogenic effect.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50 Very toxic to aquatic organisms.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

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.
H351 Suspected of causing cancer.
H373 May cause damage to organs 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.

Key or legend to abbreviations and acronyms used in the safety data sheet:

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
DNEL = Derived No Effect Level
ATE = Acute Toxicity Estimate
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation
[Regulation (EC) No. 1272/2008]