SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

TANAGARD 3755

Version 1.2 / EN    Revision Date 02.11.2012    Print Date 28.11.2014

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : TANAGARD 3755

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

Use of the Substance/Mixture : Additive

1.3 Details of the supplier of the safety data sheet

Company : Arch Timber Protection
           Wheldon Road
           Castleford
           United Kingdom
           WF10 2JT

Telephone : +44 (0)1977 714000
Telefax : +44 (0)1977 714001
Responsible/issuing person : advice@archchemicals.com
E-mail address

1.4 Emergency telephone number

Emergency telephone number : +44 (0)1235 239 670

2. Hazards identification

2.1 Classification of the substance or mixture

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

Corrosive
Harmful
Sensitising
Dangerous for the environment

R34: Causes burns.
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
R43: May cause sensitization by skin contact.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)
Hazard pictograms:
- Corrosive
- Dangerous for the environment

R-phrase(s):
- R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
- R34: Causes burns.
- R43: May cause sensitization by skin contact.
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s):
- S24/25: Avoid contact with skin and eyes.
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S27: Take off immediately all contaminated clothing.
- S28: After contact with skin, wash immediately with plenty of water.
- S35: This material and its container must be disposed of in a safe way.
- S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
- S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S61: Avoid release to the environment. Refer to special instructions/ Safety data sheets.

2.3 Other hazards
not applicable

3. Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</td>
<td>55965-84-9</td>
<td>T; R23/24/25 C; R34 R43 N; R50-R53</td>
<td>Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Acute 1; H400</td>
<td>&gt;= 3 - &lt; 5</td>
</tr>
</tbody>
</table>
4. First aid measures

4.1 Description of first aid measures

**General advice**
- Immediate medical attention is required.
- Move out of dangerous area.

**If inhaled**
- Move to fresh air.
- Keep patient warm and at rest.
- Give oxygen or artificial respiration if needed.
- Immediate medical attention is required.

**In case of skin contact**
- Take off contaminated clothing and shoes immediately.
- Wash off immediately with plenty of water for at least 15 minutes.
- Immediate medical attention is required.
- Wash contaminated clothing before re-use.

**In case of eye contact**
- Rinse immediately with plenty of water for at least 15 minutes.
- Keep eye wide open while rinsing.
- Immediate medical attention is required.
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

**If swallowed**
- Do NOT induce vomiting.
- Never give anything by mouth to an unconscious person.
- Immediate medical attention is required.

4.2 Most important symptoms and effects, both acute and delayed

**Symptoms**
- See chapter 11. Toxicological information

4.3 Indication of any immediate medical attention and special treatment needed

**Treatment**
- Treat symptomatically.
5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Carbon dioxide (CO2)
- Water spray

Unsuitable extinguishing media: Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: The product is not flammable.
- Do not allow run-off from fire fighting to enter drains or water courses.
- Burning produces noxious and toxic fumes.

5.3 Advice for firefighters

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

Further information: Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Ensure adequate ventilation.
- Avoid contact with the skin and the eyes.
- Refer to protective measures listed in sections 7 and 8.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.

6.2 Environmental precautions

Environmental precautions: The product should not be allowed to enter drains, water courses or the soil.
- If the product contaminates rivers and lakes or drains inform respective authorities.
- Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material.
- Sand
- Retain and dispose of contaminated wash water.

: Pick up and transfer to properly labelled containers.
- Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Additional advice: See chapter
8. Exposure controls/personal protection
13. Disposal considerations

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the
application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Use only in an area equipped with a safety shower.

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Use appropriate container to avoid environmental contamination.

Storage period : 6 MONTHS
Storage temperature : > 5 - < 25 °C
Other data : Protect from frost.

: No decomposition if stored and applied as directed.

7.3 Specific end uses

Specific use(s) : Waterbased additive for TANALITH E wood preservative solutions

8. Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane-1,2-diol</td>
<td>57-55-6</td>
<td>TWA</td>
<td>150 ppm 474 mg/m³</td>
<td>2007-08-01</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information : 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

| Propane-1,2-diol     | 57-55-6 | TWA   | 10 mg/m³          | 2005-04-06 | GB EH40  |
Further information: 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

8.2 Exposure controls

Engineering measures

Provide adequate ventilation.

Personal protective equipment

Respiratory protection: In the case of vapour formation use a respirator with an approved filter. Respirator with filter for organic vapour (EN 141)

Hand protection: Do not wear leather gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves must be inspected prior to use. Replace when worn. Impervious gloves Nitrile rubber

Eye protection: Wear protective gloves/ protective clothing/ eye protection/ face protection. Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Impervious clothing If splashes are likely to occur, wear: Complete suit protecting against chemicals

Hygiene measures: Avoid contact with skin, eyes and clothing. High standards of skin care and personal hygiene should be exercised at all times. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Ensure that eyewash stations and safety showers are close to
When using do not eat, drink or smoke.
Take off contaminated clothing and wash before reuse.

Protective measures

Environmental exposure controls

General advice
- The product should not be allowed to enter drains, water courses or the soil.
- If the product contaminates rivers and lakes or drains inform respective authorities.
- Prevent further leakage or spillage if safe to do so.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: liquid
- Colour: light green
- Flash point: Note: does not flash
- pH: 5
- Density: 1.09 g/cm³
- Water solubility: Note: completely soluble

9.2 Other information
- Oxidising potential: Note: Not relevant

10. Stability and reactivity

10.1 Reactivity
None known.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: Note: Stable under recommended storage conditions.

10.4 Conditions to avoid
Conditions to avoid: Protect from frost.
10.5 Incompatible materials

Materials to avoid:
- Reducing agents
- Strong bases
- Oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition: Note: None known.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity
TANAGARD 3755: LD50
- Species: rat
- Dose: estimated 2,000 mg/kg

Remarks: Harmful if swallowed.

Acute oral toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Species</th>
<th>Dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</td>
<td>Acute toxicity estimate</td>
<td>100 mg/kg</td>
<td>Converted acute toxicity point estimate</td>
<td></td>
</tr>
</tbody>
</table>

Acute inhalation toxicity
TANAGARD 3755: Remarks: Harmful by inhalation.

Acute dermal toxicity
TANAGARD 3755: LD50
- Species: rat
- Dose: estimated > 4,000 mg/kg

Remarks: Harmful in contact with skin.

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Species</th>
<th>Dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</td>
<td>Acute toxicity estimate</td>
<td>300 mg/kg</td>
<td>Converted acute toxicity point estimate</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Skin irritation
TANAGARD 3755: Remarks: Causes skin burns.
12. Ecological information

12.1 Toxicity

Toxicity to fish
TANAGARD 3755
Remarks: LC50
Species: Oncorhynchus mykiss (rainbow trout)
Dose: estimated 2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates.
TANAGARD 3755
Remarks: EC50
Species: Daphnia magna (Water flea)
Dose: estimated 5 mg/l
Exposure time: 48 h

M-Factor mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Remarks: 10

12.2 Persistence and degradability

Biodegradability
TANAGARD 3755
Remarks: no data available

12.3 Bioaccumulative potential

Bioaccumulation
TANAGARD 3755
Remarks: no data available

12.4 Mobility in soil

Mobility
TANAGARD 3755
Remarks: no data available
12.5 Results of PBT and vPvB assessment

TANAGARD 3755 : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Additional ecological information: TANAGARD 3755 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil. Dispose of as hazardous waste in compliance with local and national regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Contaminated packaging : Rinse empty containers with water and use the rinse-water to prepare the working solution. Refer to manufacturer/supplier for information on recovery/recycling.

14. Transport information

Dangerous for Transport

ADR

14.1 UN number : 1760
14.2 Proper shipping name : CORROSIVE LIQUID, N.O.S.
(mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 2-Octyl-2H-isothiazol-3-one)
14.3 Transport hazard class : 8
14.4 Packing group : III
Classification Code : C9
Hazard identification No : 80
Labels : 8
14.5 Environmentally hazardous : yes
IATA_C
14.1 UN number : 1760
14.2 Proper shipping name : Corrosive liquid n.o.s. (mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 2-Octyl-2H-isothiazol-3-one)
14.3 Transport hazard class : 8
14.4 Packing group : III
14.5 Environmentally hazardous labels : yes

IMDG
14.1 UN number : 1760
14.2 Proper shipping name : CORROSIVE LIQUID, N.O.S. (mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 2-Octyl-2H-isothiazol-3-one)
14.3 Transport hazard class : 8
14.4 Packing group : III
14.5 Marine pollutant : yes (mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 2-Octyl-2H-isothiazol-3-one)

14.6 Special precautions for user
Other information : Refer to protective measures listed in sections 7 and 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remarks : Not relevant

15. Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Major Accident Hazard Legislation : 96/82/EC Update: 2003 Dangerous for the environment 9a
Quantity 1: 100 t
Quantity 2: 200 t
Water contaminating class (Germany) : WGK 3 highly water endangering

15.2 Chemical Safety Assessment
not applicable
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.
R34        Causes burns.
R43        May cause sensitization by skin contact.
R50/53     Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

H301       Toxic if swallowed.
H311       Toxic in contact with skin.
H314       Causes severe skin burns and eye damage.
H317       May cause an allergic skin reaction.
H331       Toxic if inhaled.
H400       Very toxic to aquatic life.
H410       Very toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.