

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture
 Product name : Respondol ATF 3/3
 Product code : FNC 05 21
 Type of product : Firefighting foam concentrate (Fluorine Free)

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Industrial/Professional use spec : Industrial
 For professional use only
 Use of the substance/mixture : Firefighting foam concentrate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ANGUS FIRE Ltd
 Station Road
 LA2 7NA Bentham - United Kingdom
 T +44(0) 1524 264000 - F +44(0)1524 264180
general.enquiries@angus.co.uk - www.angusfire.co.uk

1.4. Emergency telephone number

Emergency number : +44(0) 1524 264000 (Standard office hours: Monday to Friday 8:30am - 4:30pm GMT)
 Contact person: EH&S Manager

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|---|-----------------------------------|------------------|---------|
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH Birmingham | 0344 892 0111 | |

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
 Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
 Hazard statements (CLP) : H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.
 Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.
 P280 - Wear eye protection, protective clothing, protective gloves
 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.
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
 P362+P364 - Take off contaminated clothing and wash it before reuse.

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---------|--|
| 1,2-propanediol substance with national workplace exposure limit(s) (GB) | (CAS-No.) 57-55-6 (EC-No.) 200-338-0 (REACH-no) 01-2119456809-23 | 4 - 10 | Not classified |
| 1-butoxy-2-propanol | (CAS-No.) 5131-66-8 (EC-No.) 225-878-4 (EC Index-No.) 603-052-00-8 (REACH-no) 01-2119475527-28 | 4 - 10 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| Sulfuric acid, mono-C8-10 (even numbered)-alkyl esters, sodium salts | (CAS-No.) 85338-42-7 (EC-No.) 939-332-4 (REACH-no) 01-2119972287-26 | 1 - 4 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 |
| Sodium laureth sulphate | (CAS-No.) 68891-38-3 (EC-No.) 500-234-8 (REACH-no) 01-2119488639-16 | 1 - 4 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412 |
| 1-dodecanol | (CAS-No.) 112-53-8 (EC-No.) 203-982-0 (REACH-no) 01-2119485976-15 | 0.1 - 1 | Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 |
| 1-tetradecanol | (CAS-No.) 112-72-1 (EC-No.) 204-000-3 (REACH-no) 01-2119485910-33 | 0.1 - 1 | Eye Irrit. 2, H319 Aquatic Chronic 1, H410 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits |
|---|---|---|
| Sulfuric acid, mono-C8-10 (even numbered)-alkyl esters, sodium salts | (CAS-No.) 85338-42-7 (EC-No.) 939-332-4 (REACH-no) 01-2119972287-26 | (10 =<C < 20) Eye Irrit. 2, H319 (20 =<C < 100) Eye Dam. 1, H318 |
| Sodium laureth sulphate | (CAS-No.) 68891-38-3 (EC-No.) 500-234-8 (REACH-no) 01-2119488639-16 | (5 =<C < 10) Eye Irrit. 2, H319 (10 =<C < 100) Eye Dam. 1, H318 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | : Allow affected person to breathe fresh air. Allow the victim to rest. |
| First-aid measures after skin contact | : Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. |

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

| | |
|-------------------------------------|----------------------------------|
| Symptoms/effects after skin contact | : Causes skin irritation. |
| Symptoms/effects after eye contact | : Causes serious eye irritation. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : No specific measures are necessary. This product is a fire extinguishing medium. |
| Unsuitable extinguishing media | : Not applicable. |

5.2. Special hazards arising from the substance or mixture

| | |
|-------------|-------------------|
| Fire hazard | : No fire hazard. |
|-------------|-------------------|

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

5.3. Advice for firefighters

Firefighting instructions : Not applicable.
Protection during firefighting : Not applicable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

8. Exposure controls/personal protection. 13. Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Wear recommended personal protective equipment. Read and follow manufacturer's recommendations. Handle in accordance with good industrial hygiene and safety procedures. Read and follow the Safety Data Sheet (SDS) before use.
Hygiene measures : Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store at temperatures not exceeding 60°C (140°F) (intermittent). Protect from sunlight. Protect from freezing. Keep/Store away from incompatible materials.

7.3. Specific end use(s)

Firefighting foam concentrate.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| 1,2-propanediol (57-55-6) | | |
|---------------------------|------------------------------|---|
| United Kingdom | WEL TWA (mg/m ³) | 474 mg/m ³ 10 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 150 ppm |

8.2. Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation. Follow the exposure limits given on this material safety data sheet.

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Wear protective gloves (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.2 mm coating thickness

Eye protection:

Sealed safety goggles

Skin and body protection:

Wear suitable protective clothing. Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment (recommended filter type A2/P2)

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Thermal hazard protection:

Wear thermal protective clothing, when necessary.

Environmental exposure controls:

Contain spills. Prevent releases. Observe national regulations on emissions. Ensure all national/local regulations are observed.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Colour | : Light yellow. |
| Odour | : Characteristic. |
| Odour threshold | : No data available |
| pH | : 7 - 8 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : -6 °C |
| Boiling point | : No data available |
| Flash point | : > 100 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.02 - 1.04 |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and non reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials. Extremely high or low temperatures.

10.5. Incompatible materials

Alkali metals. Oxidizing agent. Water reactive substances.

10.6. Hazardous decomposition products

Carbon oxides. Sulphur oxides. Nitrogen oxides (NOx). Sodium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| 1-dodecanol (112-53-8) | |
|---|--|
| LD50 oral rat | > 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral) |
| LD50 dermal rabbit | 8000 - 12000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal) |
| LC50 inhalation rat (mg/l) | > 71 mg/l (1 h, Rat, Male / female, Read-across, Inhalation (mist)) |
| 1-tetradecanol (112-72-1) | |
| LD50 oral rat | > 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral) |
| LD50 dermal rabbit | 8000 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal) |
| LC50 inhalation rat (mg/l) | > 1.5 mg/l air (1 h, Rat, Male / female, Experimental value, Inhalation (vapours)) |
| 1-butoxy-2-propanol (5131-66-8) | |
| LD50 oral rat | 3300 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal) |
| LC50 inhalation rat (ppm) | > 651 ppm (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours)) |
| 1,2-propanediol (57-55-6) | |
| LD50 oral rat | 22000 mg/kg (Rat, Experimental value, Oral) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight (24 h, Rabbit, Experimental value, Dermal, 14 day(s)) |
| Sodium laureth sulphate (68891-38-3) | |
| LD50 oral rat | 4100 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal) |

| | |
|-----------------------------------|---|
| Skin corrosion/irritation | : Causes skin irritation. pH: 7 - 8 |
| Serious eye damage/irritation | : Causes serious eye irritation. pH: 7 - 8 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| Respondol ATF 3/3 | |
|----------------------------------|--|
| LC50 fish 1 | > 100 mg/l (96h; Brachydanio rerio) |
| EC50 Daphnia 1 | 139 mg/l (24h; Daphnia Magna) |
| EC50 Daphnia 2 | 100 mg/l (48h; Daphnia Magna) |
| ErC50 (algae) | 348 mg/l (72h; Pseudokirchneriella subcapitata) |
| NOEC chronic algae | 100 mg/l (72h; Pseudokirchneriella subcapitata) |
| 1-dodecanol (112-53-8) | |
| LC50 fish 1 | 1.01 mg/l (96 h, Pimephales promelas, Flow-through system) |
| EC50 Daphnia 1 | 320 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna) |
| EC50 96h algae (1) | 0.97 mg/l (Scenedesmus subspicatus, Inhibition) |
| 1-tetradecanol (112-72-1) | |
| LC50 fish 1 | > 1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) |
| EC50 Daphnia 1 | 3.2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value) |
| EC50 Daphnia 2 | > 1000 mg/kg dwt (Equivalent or similar to EPA OPPTS 850.1735, 6 day(s), Heterocypris incongruens, Static system, Fresh water, Experimental value) |

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| 1-butoxy-2-propanol (5131-66-8) | |
|--|---|
| LC50 fish 1 | 560 - 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value, GLP) |
| EC50 Daphnia 1 | > 1000 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |
| EC50 96h algae (1) | > 1000 mg/l (Other, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) |

| 1,2-propanediol (57-55-6) | |
|----------------------------------|---|
| LC50 fish 1 | 51600 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Experimental value) |
| LC50 fish 2 | 40613 mg/l (Other, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value) |
| ErC50 (algae) | 24200 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) |

| Sodium laureth sulphate (68891-38-3) | |
|---|--|
| LC50 fish 1 | 7.1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Flow-through system, Fresh water, Experimental value, GLP) |
| EC50 Daphnia 1 | 7.4 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |
| ErC50 (algae) | 27.7 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP) |

12.2. Persistence and degradability

| Respondol ATF 3/3 | |
|---------------------------------|---------------------------------------|
| Persistence and degradability | The product is readily biodegradable. |
| Biochemical oxygen demand (BOD) | 67.5 g O ₂ /l (5 days) |
| Chemical oxygen demand (COD) | 449.9 g O ₂ /l |
| Biodegradation | 97 % (28 days) |

| 1-dodecanol (112-53-8) | |
|-------------------------------|--|
| Persistence and degradability | Biodegradable in the soil. Readily biodegradable in water. |
| ThOD | 3.09 g O ₂ /g substance |
| BOD (% of ThOD) | 0.3 |

| 1-tetradecanol (112-72-1) | |
|----------------------------------|------------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
| ThOD | 3.13 g O ₂ /g substance |

| 1-butoxy-2-propanol (5131-66-8) | |
|--|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| 1,2-propanediol (57-55-6) | |
|----------------------------------|--|
| Persistence and degradability | Biodegradable in the soil. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.96 - 1.08 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.63 g O ₂ /g substance |
| ThOD | 1.69 g O ₂ /g substance |

| Sodium laureth sulphate (68891-38-3) | |
|---|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

12.3. Bioaccumulative potential

| Respondol ATF 3/3 | |
|---------------------------|---|
| Bioaccumulative potential | The product is not expected to bioaccumulate. |

| 1-dodecanol (112-53-8) | |
|-------------------------------|---------------------------|
| Log Pow | 5.13 (Experimental value) |
| Bioaccumulative potential | Bioaccumable. |

| 1-tetradecanol (112-72-1) | |
|----------------------------------|--|
| BCF other aquatic organisms 1 | 33900 (Calculated value) |
| Log Pow | 5.94 - 6.11 |
| Bioaccumulative potential | High potential for bioaccumulation (BCF > 5000). |

| 1-butoxy-2-propanol (5131-66-8) | |
|--|---|
| Log Pow | 1.2 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| 1,2-propanediol (57-55-6) | |
|--------------------------------------|--|
| BCF other aquatic organisms 1 | 0.09 |
| Log Pow | -1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C) |
| Bioaccumulative potential | Not bioaccumulative. |
| Sodium laureth sulphate (68891-38-3) | |
| Log Pow | 0.3 (Experimental value, OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method, 23 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

12.4. Mobility in soil

| 1-dodecanol (112-53-8) | |
|--------------------------------------|---|
| Surface tension | 31.8 mN/m (23 °C, 6.4 mg/l) |
| Ecology - soil | Adsorbs into the soil. |
| 1-tetradecanol (112-72-1) | |
| Surface tension | 0.024 N/m |
| Log Koc | 4.71 (log Koc, Experimental value) |
| Ecology - soil | Adsorbs into the soil. |
| 1-butoxy-2-propanol (5131-66-8) | |
| Surface tension | 57.6 N/m (20 °C, 100 vol %) |
| Ecology - soil | Low potential for adsorption in soil. |
| 1,2-propanediol (57-55-6) | |
| Surface tension | 71.6 mN/m (21.5 °C, 1.01 g/l, EU Method A.5: Surface tension) |
| Log Koc | 0.46 (log Koc, Calculated value) |
| Ecology - soil | Highly mobile in soil. |
| Sodium laureth sulphate (68891-38-3) | |
| Surface tension | 33 mN/m (25 °C, 721 mg/l, BS EN 14370:2004: Surface tension) |
| Log Koc | 0.34 (log Koc, Other, QSAR) |
| Ecology - soil | Highly mobile in soil. |

12.5. Results of PBT and vPvB assessment

| Respondol ATF 3/3 | |
|---|---|
| PBT: not relevant – no registration required | |
| vPvB: not relevant – no registration required | |
| Component | |
| 1-tetradecanol (112-72-1) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| 1-butoxy-2-propanol (5131-66-8) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| 1,2-propanediol (57-55-6) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Sodium laureth sulphate (68891-38-3) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Concentrate

Prevent foam concentrate from entering ground water, surface water or storm drains. Small quantities of foam concentrate may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations. High temperature incineration is required at a minimum of 1000°C with a minimum residence time of 2 seconds.

Foam/Foam Solution

Prevent foam/foam solution from entering ground water, surface water or storm drains. Small quantities of foam solution may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations. High temperature incineration is required at a minimum of 1000°C with a minimum residence time of 2 seconds.

NOTE: Please consult Angus Fire for additional information regarding the disposal of foam concentrates and foam solutions or visit <https://angusfire.co.uk/use-discharge-and-disposal-of-firefighting-foam-products/>.

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.
European List of Waste (LoW) code : 16 03 05* - organic wastes containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|----------------|----------------|----------------|----------------|
| 14.1. UN number | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping name | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available | | | | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Respondol ATF 3/3 - 1-butoxy-2-propanol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

France

Occupational diseases : RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel
RG 66 - Rhinites et asthmes professionnels

Germany

Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Respondol ATF 3/3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Netherlands

SZW-lijst van kankerverwekkende stoffen : 1-dodecanol is listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| 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. |
| H412 | Harmful to aquatic life with long lasting effects. |

SDS EU (REACH Annex II) - Angus Fire

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.