

Conforms to Regulation (EC) No. 453/2010 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

**SAFETY DATA SHEET****Tankguard SF Comp B****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

**Product name** : Tankguard SF Comp B  
**Product code** : 7742  
**Product description** : Hardener.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

Use in coatings - Industrial use  
 Use in coatings - Professional use

**1.3 Details of the supplier of the safety data sheet**

MANUFACTURER/SUPPLIER:  
 Jotun Paints (Europe) Ltd.  
 Stather Road  
 Flixborough, Scunthorpe  
 North Lincolnshire  
 DN15 8RR  
 England

Tel: +44 17 24 40 00 00  
 Fax: +44 17 24 40 01 00  
 SDSJotun@jotun.com

**1.4 Emergency telephone number**

Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

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

**Product definition** : Mixture

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





Acute Tox. 4, H302  
 Skin Corr. 1B, H314  
 Eye Dam. 1, H318  
 Skin Sens. 1, H317  
 STOT RE 2, H373 (heart, kidneys)  
 Aquatic Acute 1, H400  
 Aquatic Chronic 1, H410

**2.2 Label elements**

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**Tankguard SF Comp B****SECTION 2: Hazards identification**

|  |   |  |
|--|---|--|
| <b>Hazard pictograms</b>                                   | : |       |
| <b>Signal word</b>   | : | Danger.  |
| <b>Hazard statements</b>                                   | : | H302 - Harmful if swallowed.<br>H314 - Causes severe skin burns and eye damage.<br>H317 - May cause an allergic skin reaction.<br>H373 - May cause damage to organs through prolonged or repeated exposure.<br>(heart, kidneys)<br>H410 - Very toxic to aquatic life with long lasting effects.  |
| <b>Precautionary statements</b>                            |   |  |
| <b>General</b>   | : | Not applicable.  |
| <b>Prevention</b>  | : | P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.<br>P273 - Avoid release to the environment.<br>P260 - Do not breathe vapour or spray.  |
| <b>Response</b>  | : | P391 - Collect spillage.<br>P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.<br>P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.<br>P303 + P361 + P533 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician.<br>P333 + P313 - If skin irritation or rash occurs: Get medical attention.<br>P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. |
| <b>Storage</b>   | : | P405 - Store locked up.  |
| <b>Disposal</b>  | : | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
| <b>Hazardous ingredients</b>                               | : | benzenedimethanamine, n-(2-phenylethyl) derivs.<br>formaldehyde, polymer with benzenamine, hydrogenated<br>4,4'-methylenebis(cyclohexylamine)  |
| <b>Supplemental label elements</b>                         | : | Not applicable.  |
| <b>2.3 Other hazards</b>                                   |   |  |
| <b>Other hazards which do not result in classification</b> | : | None known.  |

**SECTION 3: Composition/information on ingredients****Substance/mixture** : Mixture

| Product/ingredient name | Identifiers | % | <a href="#">Classification</a><br>Regulation (EC) No. 1272/2008<br>[CLP] | Type | Notes |
|-------------------------|-------------|---|--|------|-------|
|                         |             |   |  |      |       |

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**Tankguard SF Comp B****SECTION 3: Composition/information on ingredients**

|  |   |           |  |     |   |
|--|---|-----------|--|-----|---|
| benzenedimethanamine, n-(2-phenylethyl) derivs.      | EC: 445-790-1<br>CAS: 404362-22-7   | ≥50 - ≤75 | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT RE 2, H373 (heart)<br>Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 1, H410 (M=1)                     | [1] | - |
| benzyl alcohol                                       | REACH #:<br>01-2119492630-38<br>EC: 202-859-9<br>CAS: 100-51-6                        | ≥10 - ≤21 | Acute Tox. 4, H302<br>Acute Tox. 4, H332   | [1] | - |
| formaldehyde, polymer with benzenamine, hydrogenated | REACH #:<br>01-2119983522-33<br>CAS: 135108-88-2                                      | ≥10 - ≤19 | Acute Tox. 4, H302<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT RE 2, H373 (kidneys) (oral)<br>Aquatic Chronic 3, H412   | [1] | - |
| 3-aminopropyltriethoxysilane                         | REACH #:<br>01-2119480479-24<br>EC: 213-048-4<br>CAS: 919-30-2<br>Index: 612-108-00-0 | ≤3        | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318  | [1] | - |
| 4,4'-methylenebis (cyclohexylamine)                  | REACH #:<br>01-2119541673-38<br>EC: 217-168-8<br>CAS: 1761-71-3                       | <1        | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317<br>STOT RE 2, H373 (liver)<br><br><b>See Section 16 for the full text of the H statements declared above.</b> | [1] | - |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

**Type**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General**

: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

**Inhalation**

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact**

: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

**Eye contact**

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

**Ingestion**

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

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**Tankguard SF Comp B****SECTION 4: First aid measures**

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains benzenedimethanamine, n-(2-phenylethyl) derivs., formaldehyde, polymer with benzenamine, hydrogenated, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

**Potential acute health effects**

**Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes severe burns. May cause an allergic skin reaction.  
**Ingestion** : Harmful if swallowed.

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:  
 pain  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur  
**Ingestion** : Adverse symptoms may include the following:  
 stomach pains

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.  
**Specific treatments** : No specific treatment.

**Tankguard SF Comp B****SECTION 5: Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.

**Unsuitable extinguishing media** : Do not use water jet.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

**5.3 Advice for firefighters**

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions**

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**6.3 Methods and material for containment and cleaning up**

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Tankguard SF Comp B****SECTION 6: Accidental release measures**

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

**Information on fire and explosion protection**

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations.

**Notes on joint storage**

Keep away from: oxidising agents, strong alkalis, strong acids.

**Additional information on storage conditions**

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

**7.3 Specific end use(s)**

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.



**Tankguard SF Comp B****SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**8.1 Control parameters****Occupational exposure limits**

No exposure limit value known.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Derived no effect levels**

| Product/ingredient name            | Type | Exposure              | Value                   | Population | Effects  |
|------------------------------------|------|-----------------------|-------------------------|------------|----------|
| benzyl alcohol                     | DNEL | Short term Inhalation | 450 mg/m <sup>3</sup>   | Workers    | Systemic |
|                                    | DNEL | Long term Inhalation  | 90 mg/m <sup>3</sup>    | Workers    | Systemic |
|                                    | DNEL | Short term Dermal     | 47 mg/kg bw/day         | Workers    | Systemic |
|                                    | DNEL | Long term Dermal      | 9.5 mg/kg bw/day        | Workers    | Systemic |
|                                    | DNEL | Short term Dermal     | 28.5 mg/kg bw/day       | Consumers  | Systemic |
|                                    | DNEL | Short term Oral       | 25 mg/kg bw/day         | Consumers  | Systemic |
|                                    | DNEL | Long term Dermal      | 5.7 mg/kg bw/day        | Consumers  | Systemic |
|                                    | DNEL | Long term Oral        | 5 mg/kg bw/day          | Consumers  | Systemic |
|                                    | DNEL | Long term Inhalation  | 8.11 mg/m <sup>3</sup>  | Consumers  | Systemic |
|                                    | DNEL | Short term Inhalation | 40.55 mg/m <sup>3</sup> | Consumers  | Systemic |
| 3-aminopropyltriethoxysilane       | DNEL | Short term Dermal     | 8.3 mg/kg bw/day        | Workers    | Systemic |
|                                    | DNEL | Short term Inhalation | 59 mg/m <sup>3</sup>    | Workers    | Systemic |
|                                    | DNEL | Long term Dermal      | 8.3 mg/kg bw/day        | Workers    | Systemic |
|                                    | DNEL | Long term Inhalation  | 59 mg/m <sup>3</sup>    | Workers    | Systemic |
|                                    | DNEL | Short term Dermal     | 5 mg/kg bw/day          | Consumers  | Systemic |
|                                    | DNEL | Short term Inhalation | 17.4 mg/m <sup>3</sup>  | Consumers  | Systemic |
|                                    | DNEL | Long term Dermal      | 5 mg/kg bw/day          | Consumers  | Systemic |
|                                    | DNEL | Long term Inhalation  | 17.4 mg/m <sup>3</sup>  | Consumers  | Systemic |
| 4,4'-methylenebis(cyclohexylamine) | DNEL | Short term Dermal     | 0.63 mg/kg bw/day       | Workers    | Systemic |
|                                    | DNEL | Short term            | 1.5 mg/m <sup>3</sup>   | Workers    | Systemic |

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**Tankguard SF Comp B****SECTION 8: Exposure controls/personal protection**

|  |      |                      |                       |           |          |
|--|------|----------------------|-----------------------|-----------|----------|
|  | DNEL | Inhalation           | 0.21 mg/kg bw/day     | Workers   | Systemic |
|  | DNEL | Long term Dermal     | 0.5 mg/m <sup>3</sup> | Workers   | Systemic |
|  | DNEL | Long term Inhalation | 0.125 mg/kg bw/day    | Workers   | Systemic |
|  | DNEL | Long term Dermal     | 0.125 mg/kg bw/day    | Consumers | Systemic |
|  | DNEL | Long term Oral       | 0.125 mg/kg bw/day    |           |          |

**Predicted no effect concentrations**

| Product/ingredient name            | Type | Compartment Detail     | Value           | Method Detail |
|------------------------------------|------|------------------------|-----------------|---------------|
| Benzyl alcohol                     | PNEC | Fresh water            | 1 mg/l          | -             |
|                                    | PNEC | Marine                 | 0.1 mg/l        | -             |
|                                    | PNEC | Sewage Treatment Plant | 39 mg/l         | -             |
| 3-aminopropyltriethoxysilane       | PNEC | Fresh water sediment   | 5.27 mg/kg dwt  | -             |
|                                    | PNEC | Marine water sediment  | 0.527 mg/kg dwt | -             |
|                                    | PNEC | Soil                   | 0.456 mg/kg dwt | -             |
|                                    | PNEC | Fresh water            | 0.33 mg/l       | -             |
|                                    | PNEC | Marine                 | 0.033 mg/l      | -             |
|                                    | PNEC | Sewage Treatment Plant | 13 mg/l         | -             |
| 4,4'-methylenebis(cyclohexylamine) | PNEC | Fresh water sediment   | 1.2 mg/kg dwt   | -             |
|                                    | PNEC | Marine water sediment  | 0.12 mg/kg dwt  | -             |
|                                    | PNEC | Soil                   | 0.05 mg/kg dwt  | -             |
|                                    | PNEC | Fresh water            | 0.008 mg/l      | -             |
|                                    | PNEC | Marine                 | 0.0008 mg/l     | -             |
|                                    | PNEC | Sewage Treatment Plant | 80 mg/l         | -             |
|                                    | PNEC | Fresh water sediment   | 0.39 mg/kg dwt  | -             |
|                                    | PNEC | Marine water sediment  | 0.039 mg/kg dwt | -             |
|                                    | PNEC | Soil                   | 0.072 mg/kg dwt | -             |

**8.2 Exposure controls****Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures****Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

: Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection****Hand protection**

: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

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**Tankguard SF Comp B****SECTION 8: Exposure controls/personal protection**

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Wear suitable gloves tested to EN374.

Recommended, gloves(breakthrough time) > 8 hours: Viton®, 4H

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber

Not recommended, gloves(breakthrough time) < 1 hour: nitrile rubber, PVC

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoal filter.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Colour** : Various colours.
- Odour** : Characteristic.
- Odour threshold** : Not applicable.
- pH** : Not applicable.
- Melting point/freezing point** : Not applicable.
- Initial boiling point and boiling range** : Lowest known value: 205.3°C (401.5°F) (benzyl alcohol). Weighted average: 222.21°C (432°F)
- Flash point** : Closed cup: 87°C
- Evaporation rate** : 0.007 (benzyl alcohol) compared with butyl acetate
- Flammability (solid, gas)** : Not applicable.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : 1.3 - 13%
- Vapour pressure** : Highest known value: 0.02 kPa (0.2 mm Hg) (at 20°C) (benzyl alcohol). Weighted average: 0.01 kPa (0.08 mm Hg) (at 20°C)
- Vapour density** : Highest known value: 3.7 (Air = 1) (benzyl alcohol).

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**Tankguard SF Comp B****SECTION 9: Physical and chemical properties**

|   |  |
|---|--|
| <b>Relative density</b>                       | : 1.05 g/cm <sup>3</sup>   |
| <b>Solubility(ies)</b>                        | : Insoluble in the following materials: cold water and hot water.  |
| <b>Partition coefficient: n-octanol/water</b> | : Not available.   |
| <b>Auto-ignition temperature</b>              | : Lowest known value: 436°C (816.8°F) (benzyl alcohol).  |
| <b>Decomposition temperature</b>              | : Not available.   |
| <b>Viscosity</b>                              | : <input checked="" type="checkbox"/> Kinematic (40°C): >0.205 cm <sup>2</sup> /s (>20.5 mm <sup>2</sup> /s) |
| <b>Explosive properties</b>                   | : Not available.   |
| <b>Oxidising properties</b>                   | : Not available.   |

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

|  |   |
|--|---|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.  |
| <b>10.2 Chemical stability</b>                 | : The product is stable.  |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.   |
| <b>10.4 Conditions to avoid</b>                | : No specific data.   |
| <b>10.5 Incompatible materials</b>             | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.<br><input checked="" type="checkbox"/> Under normal conditions of storage and use, hazardous reactions will not occur. |
| <b>10.6 Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains benzenedimethanamine, n-(2-phenylethyl) derivs., formaldehyde, polymer with benzenamine, hydrogenated, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

| Product/ingredient name                            | Result    | Species | Dose       | Exposure |
|--|-----------|---------|------------|----------|
| <input checked="" type="checkbox"/> Benzyl alcohol | LD50 Oral | Rat     | 1230 mg/kg | -        |
| 3-aminopropyltriethoxysilane                       | LD50 Oral | Rat     | 1780 mg/kg | -        |

**Acute toxicity estimates**

**Tankguard SF Comp B****SECTION 11: Toxicological information**

| Route                        | ATE value                 |
|------------------------------|---------------------------|
| Oral<br>Inhalation (vapours) | 551.4 mg/kg<br>94.19 mg/l |

**Irritation/Corrosion**

| Product/ingredient name            | Result                 | Species | Score | Exposure                | Observation |
|------------------------------------|------------------------|---------|-------|-------------------------|-------------|
| 4,4'-methylenebis(cyclohexylamine) | Eyes - Severe irritant | Rabbit  | -     | 24 hours 10 microliters | -           |

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name   | Category                               | Route of exposure                        | Target organs             |
|---|--|--|---------------------------|
| benzenedimethanamine, n-(2-phenylethyl) derivs.<br>formaldehyde, polymer with benzenamine, hydrogenated<br>4,4'-methylenebis(cyclohexylamine) | Category 2<br>Category 2<br>Category 2 | Not determined<br>Oral<br>Not determined | heart<br>kidneys<br>liver |

**Aspiration hazard**

Not available.

**Potential acute health effects**

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : Causes serious eye damage.                                |
| <b>Inhalation</b>   | : No known significant effects or critical hazards.         |
| <b>Skin contact</b> | : Causes severe burns. May cause an allergic skin reaction. |
| <b>Ingestion</b>    | : Harmful if swallowed.                                     |

**Symptoms related to the physical, chemical and toxicological characteristics**

|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness                           |
| <b>Inhalation</b>   | : No specific data.  |
| <b>Skin contact</b> | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur |
| <b>Ingestion</b>    | : Adverse symptoms may include the following:<br>stomach pains   |

**Potential chronic health effects**

|                              |  |
|------------------------------|--|
| <b>General</b>               | : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| <b>Carcinogenicity</b>       | : No known significant effects or critical hazards.  |
| <b>Mutagenicity</b>          | : No known significant effects or critical hazards.  |
| <b>Teratogenicity</b>        | : No known significant effects or critical hazards.  |
| <b>Developmental effects</b> | : No known significant effects or critical hazards.  |
| <b>Fertility effects</b>     | : No known significant effects or critical hazards.  |

**Tankguard SF Comp B****SECTION 12: Ecological information****12.1 Toxicity**

| Product/ingredient name                | Result               | Species | Exposure |
|--|----------------------|---------|----------|
| 4,4'-methylenebis<br>(cyclohexylamine) | Acute EC50 6.84 mg/l | Daphnia | 48 hours |
|  | Acute IC50 140 mg/l  | Algae   | 72 hours |
|  | Acute LC50 46 mg/l   | Fish    | 96 hours |

**Conclusion/Summary** : This material is very toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

| Product/ingredient name                | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| benzyl alcohol                         | -                 | -          | Readily          |
| 4,4'-methylenebis<br>(cyclohexylamine) | -                 | -          | Not readily      |

**12.3 Bioaccumulative potential**

| Product/ingredient name                                 | LogP <sub>ow</sub> | BCF        | Potential |
|---|--------------------|------------|-----------|
| benzyl alcohol  | 0.87               | <100       | low       |
| formaldehyde, polymer with<br>benzenamine, hydrogenated | -                  | 209 to 219 | low       |
| 3-aminopropyltriethoxysilane                            | 1.7                | 3.4        | low       |
| 4,4'-methylenebis<br>(cyclohexylamine)                  | 2.03               | -          | low       |

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods**

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

**European waste catalogue (EWC)** : 08 01 11\* Waste paint and varnish containing organic solvents or other dangerous substances

**Tankguard SF Comp B****SECTION 14: Transport information**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

International transport regulations

- 14.1 UN number** : 3066
- 14.2 UN proper shipping name** : Paint related material. Marine pollutant (benzenedimethanamine, n-(2-phenylethyl) derivs.)
- 14.3 Transport hazard class(es)** : 8



- Marking** : The environmental hazardous / marine pollutant mark is only applicable for packages containing more than 5 litres for liquids and 5 kg for solids.
- 14.4 Packing group** : II
- 14.5 Environmental hazards** : Yes.
- 14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Additional information**
- ADR / RID** : Tunnel restriction code: (E)  
Hazard identification number: 80
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- Emergency schedules (EmS)**  
F-A, S-B
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.
- IMDG Code Segregation group** : ☒ Not available.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**EU Regulation (EC) No. 1907/2006 (REACH)Annex XIV - List of substances subject to authorisationSubstances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

Other EU regulations

- Europe inventory** : Not determined.
- Black List Chemicals** : Not listed

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**Tankguard SF Comp B****SECTION 15: Regulatory information**

**Industrial emissions  
(integrated pollution  
prevention and control) -  
Air** : Not listed

**Industrial emissions  
(integrated pollution  
prevention and control) -  
Water** : Not listed

**Chemical Weapons  
Convention List Schedule I  
Chemicals** : Not listed

**Chemical Weapons  
Convention List Schedule II  
Chemicals** : Not listed

**Chemical Weapons  
Convention List Schedule III  
Chemicals** : Not listed

**15.2 Chemical safety  
assessment** : Not applicable.

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and  
acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification  | Justification  |
|---|--|
| Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT RE 2, H373 (heart, kidneys)<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**Full text of abbreviated H  
statements** :

|      |  |
|------|--|
| H302 | Harmful if swallowed.  |
| H314 | Causes severe skin burns and eye damage.   |
| H317 | May cause an allergic skin reaction.   |
| H318 | Causes serious eye damage.   |
| H332 | Harmful if inhaled.  |
| H373 | May cause damage to organs through prolonged or repeated exposure if (oral) swallowed. |
| 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.                                  |
| H412 | Harmful to aquatic life with long lasting effects.                                     |

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**Tankguard SF Comp B****SECTION 16: Other information**

|   |          |                         |  |
|---|----------|-------------------------|--|
| <b>Full text of classifications [CLP/GHS]</b> | <b>:</b> | Acute Tox. 4, H302      | ACUTE TOXICITY (oral) - Category 4                                     |
|   |          | Acute Tox. 4, H332      | ACUTE TOXICITY (inhalation) - Category 4                               |
|   |          | Aquatic Acute 1, H400   | ACUTE AQUATIC HAZARD - Category 1                                      |
|   |          | Aquatic Chronic 1, H410 | LONG-TERM AQUATIC HAZARD - Category 1                                  |
|   |          | Aquatic Chronic 3, H412 | LONG-TERM AQUATIC HAZARD - Category 3                                  |
|   |          | Eye Dam. 1, H318        | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1                         |
|   |          | Skin Corr. 1B, H314     | SKIN CORROSION/IRRITATION - Category 1B                                |
|   |          | Skin Corr. 1C, H314     | SKIN CORROSION/IRRITATION - Category 1C                                |
|   |          | Skin Sens. 1, H317      | SKIN SENSITISATION - Category 1  |
|   |          | Skin Sens. 1B, H317     | SKIN SENSITISATION - Category 1B                                       |
|   |          | STOT RE 2, H373 (oral)  | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (oral) - Category 2 |
|   |          | STOT RE 2, H373         | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2        |
|   |          |                         |  |

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If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.