SAFETY DATA SHEET

PRODUCT NAME: GBR Formulation 42

PRODUCT CODE: GBR Formulation 42

1.IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

1.1 Product Identifier

TRADE NAME OTHER NAMES CHEMICAL SYNONYMS GBR Formulation 42 None Non-ionic surfactants

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

IDENTIFIED USES

Turf wetting agent

1.3 Details of the supplier of the safety data sheet

SUPPLIER:

GBR TECHNOLOGY LTD UNIT 42, EASTER PARK BENYON ROAD SILCHESTER READING, BERKS RG7 2PQ Tel: 0118 9820567 Fax: 0118 9820590

Email address of person responsible

info@gbrtech.co.uk

1.4 Emergency telephone number

SUPPLIER: HOURS OF OPERATION: INFORAMTION LIMITATIONS: 0118 9820567 Monday to Friday 08:30 – 17:00 HRS Not applicable

2. HAZARD INDENTIFICATION

2.1 Classification of the substance or mixture

PRODUCT DEFINITION:

Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Eye irritant 2 Aquatic Chronic 3 2.2 Label elements



PICTOGRAM:

SIGNAL WORD: HAZARD STATEMENTS:

PRECAUTIONARY STATEMENTS: (prevention)

PRECAUTIONARY STATEMENTS: (response)

PRECAUTIONARY STATEMENTS: (disposal)

Warning
H319 Causes serious eye irritation
H412 Harmful to aquatic life with long lasting effects
P280 Wear eye/face protection
P270 Do not eat, drink or smoke when using this product
P264 Wash with plenty of water and soap thoroughly after
handling
P310 Immediately call a poison centre or doctor/physician
P305+P351+P338 IF IN EYES: Rinse cautiously with water
for several minutes. Remove contact lenses if present and easy
to do so. Continue rinsing.
P301+P330 IF SWALLOWED: Rinse mouth

P501 Dispose of contents/container to hazardous or special waste collection point

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE:

Mixture

3.1 SubstancesNot applicable3.2 MixturesChemical nature: Surfactant mixtureHazardous ingredients:
NameCas No.%Oxirane, methyl-, polymer with oxirane
3-(Polyoxyethylene)propylheptamethyltrisiloxane67674-67-3Fatty alcohol alkoxylate<20</td>

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.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove and contact lenses. Get medical attention if irritation occurs.

| Inhalation: | Keep patient calm. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler. |
|---------------|--|
| Skin contact: | Immediately wash contaminated skin with plenty of water. Remove contaminated clothing and shoes. Apply sterile dressings to any damage skin. Get medical attention if symptoms occur. |
| Ingestion: | Immediately wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities (200ml – 300ml) of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention. |

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

4.3 Indication of any immediate medical attention and special treatment needed

| Notes to physician: | Treat symptomatically. Contact poison treatment specialist immediately if large |
|----------------------|---|
| | quantities have been ingested or inhaled. |
| Specific treatments: | No specific treatment. |

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

| Suitable extinguishing media: | Use an extinguishing agent suitable for the surrounding fire. Foam (specifically trained personnel only), water fog (specifically trained personnel only), dry chemical powder, carbon dioxide, other | |
|--|---|--|
| Unsuitable extinguishing media: | inert gases (subject to regulation), sand or earth. Do not use direct water jets on the burning product: they could cause | |
| | splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. | |
| 5.2 Specific hazards arising from the substance or mixture | | |

| Hazards from the substance or mixture: Hazardous combustion products: | In a fire or if heated, a pressure increase will occur and the container may burst. Harmful vapours/fumes/smoke will be liberated by incomplete combustion. CO/CO ₂ , silicone dioxide will also be emitted. | | |
|---|---|--|--|
| 5.3 Advice for firefighters | | | |
| Special precautions for firefighters: Promptly isolate the scene by removing all persons form 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 firefighters: | Fire-fighter 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 with provide a basic level of protection for chemical incidents. | | |
| Additional information: | Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. | | |

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. Put on appropriate personal protective equipment. |
|-----------------------------------|---|
| For Emergency Responders: | If specialised clothing is required to deal with spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures. |
| 6.2 Environmental Precautions: | Avoid dispersal of spilt material and run off and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air) |
| 6.3 Methods and Materials for co | ntainment and cleaning up |
| Small Spill: | Stop leak if without risk. Move containers away 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 appropriate waste disposal container. Dispose of via a licensed waste disposal |
| | contractor. |
| Large Spill: | Stop leak if without risk. Move containers away from spill area. 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. |
| 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. |

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).

| Precautions for safe handling | | |
|-------------------------------|---|--|
| Protective Measures: | Put on appropriate personal protective equipment (see Section 8) | |
| Advice on general | | |
| occupational hygiene: | Eating, drinking and smoking should be prohibited in the areas where | |
| | this material is handled, stored and processed. Workers should wash | |
| | hands and face before eating, drinking and smoking. Remove | |
| | contaminated clothing and protective equipment before entering eating | |
| | areas. See also Section 8 for additional information on hygiene | |
| | measures. | |
| Conditions for safe storag | e, including any incompatibilities: | |
| | Store in accordance with local regulations. Store in original container | |
| | protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. | |
| | Keep container tightly closed and sealed until ready for use. Containers | |
| | that have been opened must be carefully resealed and kept upright to | |
| | Advice on general occupational hygiene: | |

prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

 7.3 Specific end use(s) Recommendations: This product is designed as a turf wetting agent, to be diluted in water prior to application at recommended rates to turf. Safe handling should be observed and the necessary personal protective equipment used.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control Parameters

OCCUPATIONAL EXPOSURE LIMITS:

No occupational exposure limits known.

8.2 Exposure Controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficacy for solid and liquid particles (e.g. EN 143 or 149 Type P2 or EEP2)

| liquid particles (e.g. EN 143 or 149, Type P2 or FFP2) | | | |
|--|---|--|--|
| Hand protection: | Chemical resistant protective gloves (EN 374). Suitable materials also | | |
| | with prolonged, direct contact (recommended: Protective index 6, | | |
| | corresponding >480 minutes of permeation time according to EN 374: | | |
| | Nitrile rubber (NBR) – 0.4mm coating thickness | | |
| Eye protection: | Tightly fitting safety goggles (cage goggles - e.g. EN 166) and face | | |
| | shield | | |
| Body protection: | Body protection must be chosen depending upon activity and possible | | |
| | exposure, e.g. apron, protective boots, chemical protection suit | | |
| (according to EN 14605 in case of splashes or EN ISO 139 | | | |
| | dust) | | |
| General safety and hygiene measu | res: Wearing of closed work clothing is required additionally to the stated | | |
| | personal protective equipment. No eating, drinking, smoking or | | |
| | tobacco use at the place of handling. Handling in accordance with good | | |
| | industrial hygiene and safety practice. | | |
| | | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance

Physical State: Colour: Odour: Odour Threshold: pH: Melting / Freezing point: Initial Boiling point and boiling range: Flash Point: Evaporation Rate:

Liquid Colourless to yellowish Mild - product specific Not Available No data below 0°C No data

>100°C Not Available

| | Flammability: | Not self igniting |
|-----|----------------------------|--|
| | Burning Time: | Not Applicable |
| | Burning Rate: | Not Applicable |
| | Upper / Lower | |
| | flammability or | |
| | explosive limits: | Not Available |
| | Vapour Pressure: | Not available |
| | Vapour Density: | Not Available |
| | Relative Density: | 1.02 gcm ⁻³ @ 25°C typical |
| | Solubility (ies): | Soluble in Water |
| | Partition Coefficient: | |
| | n-octanol/water: | Not Available |
| | Auto-Ignition Temperature: | Not Available |
| | Decomposition Temperature: | Not Available |
| | Explosive Properties: | Not explosive. Containers may explode in heat of fire. |
| | Oxidising Properties: | Not Available |
| | Viscosity (dynamic): | Not Available |
| | Surface Tension: | Not available |
| 9.2 | Other Information | |
| | No Additional Information | |

10. STABILITY AND REACTIVITY

| 10.1 | Reactivity: | No specific test date related to reactivity available for this product or its |
|---------|--------------------------|---|
| ingredi | ents | |
| 10.2 | Chemical Stability: | The product is stable |
| 10.3 | Possibility of hazardous | |
| | reactions: | Under normal conditions of storage and use, hazardous reactions will |
| | | not occur. |
| 10.4 | Conditions to Avoid: | No specific Data |
| 10.5 | Incompatible Materials: | Caustics, halogens, strong alkalis, acids, reactive chemicals. |
| 10.6 | Hazardous decomposition | |
| | products: | None if stored and handled as indicated. May release COx, smoke and |
| | | irritating vapours when heated to decomposition. |

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects

<u>Acute Toxicity</u> Experimental/calculated data:

Irritation

Experimental/calculated data:

Skin corrosion/irritation rabbit: No data

Serious eye damage/irritation rabbit: No data

Aspiration hazard

No data

No aspiration hazard expected

Other relevant toxicity information

This product has not been tested

12. ECOLOGICAL INFORMATION

| 12.1 | Toxicity Aquatic invertebrates Toxicity to fish: | EC50 (48h) >10mg/l (Daphnia sp.) – based on data from similar materials LC50 (96h) >10mg/l – based on data from similar materials. |
|------|--|---|
| 12.2 | Persistence and degradab Elimination information: | ility No data available |
| 12.3 | Bioaccumulative Potentia Assessment: | ıl No data available |
| 12.4 | Mobility in Soil Assessment: | Volatility – the substance will not evaporate into the atmosphere from the water surface. Adsorption in soil – adsorption to solid soil phase is possible |
| 12.5 | Results of PBT and vPvB | · · · |
| | PBT: vPvB: | Not Applicable Not Applicable |
| 12.6 | Other adverse effects: | No known significant effects or critical hazards |

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

Product

| Methods of Disposal: | The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non – recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues and if not cleaned should be disposed of in the same manner as the contents. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |
|----------------------|---|

| 14. TRANSPORT INFORMATION | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| ADR / RID AND / ADNR IMDG IATA | | | | | | |
| 14.1 UN Number Not Regulated Not Regulated Not Regulated Not Regulated | | | | | | |

Safety Data Sheet

| 14.2 Proper Shipping | - | - | - | - |
|------------------------|---------------|---------------|---------------|---------------|
| Name | | | | |
| 14.3 Transport Hazard | - | - | - | - |
| Class(es) | | | | |
| 14.4 Packing Group | - | - | - | - |
| 14.5 Environmental | No | No | No | No |
| Hazards | | | | |
| 14.6 Special | Not Available | Not Available | Not Available | Not Available |
| Precautions for user | | | | |
| Additional Information | - | - | - | - |

14.7 Transport in Bulk according To Annex II of MARPOL 73/78 and The IBC Code:

Not Available

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 authorisation Substances 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

15.2 Chemical Safety Assessment: Complete

| 16. OTHER INFORMATION | | | | |
|-----------------------------------|----------------------------------|--|--|--|
| | | | | |
| Date of Printing: | 07 March 2019 | | | |
| Date of Issue / Date of revision: | 25 February 2019 | | | |
| Date of Previous Issue Version: | - | | | |
| Version: | 1 | | | |
| Prepared by: | ADF | | | |
| For Copy of SDS: | Email: <u>info@gbrtech.co.uk</u> | | | |
| | 0118 9820 567 | | | |
| For product Safety Information: | Email: <u>info@gbrtech.co.uk</u> | | | |
| | 0118 9820 567 | | | |
| | | | | |

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplied, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are only hazards that exist.