SAFETY DATA SHEET

PRODUCT NAME: HYDROZONE

PRODUCT CODE: HYDROZONE

1.IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

1.1 Product Identifier

TRADE NAME Hydrozone Residual Wetting Agent

OTHER NAMES Residual Wetting Agent

CHEMICAL SYNONYMS Mixture containing Oxirane, methyl – polymer with oxirane

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

IDENTIFIED USES Turf Wetting Surfactant

1.3 Details of the supplier of the safety data sheet

SUPPLIER: GBR TECHNOLOGY LTD

UNIT 42, EASTER PARK

BENYON ROAD SILCHESTER

BERKSHIRE RG7 2PQ

Tel: 0118 9820567 Fax: 0118 9820590

Email address of person responsible info@gbrtech.co.uk

1.4 Emergency telephone number

SUPPLIER: 0118 9820567

HOURS OF OPERATION: Monday to Friday 0830 – 17:00 HRS

INFORMATION LIMITATIONS: 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]

Not classified

2.2 Label elements: This product does not require a hazard warning label in

accordance with GHS criteria.

SIGNAL WORD: No signal word

HAZARD STATEMENTS: No known significant effects or critical hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: Substance

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]
Oxirane, methyl-, polymer with oxirane	CAS:9003-11-6	> 90	Not Classified
3-(Polyoxyethylene) Propylheptamethyl trisiloxane	CAS: 67674-67-3	< 1%	Acute Toxicity, Cat 4 H332 Serious Eye Damage, Cat.1 H318 Chronic Aquatic Toxicity, Cat 2. H411

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.

2.2 Label Elements: This product does not require a hazard warning label in accordance with GHS

criteria.

2.3 Other Hazards: No specific dangers known, if the regulations/notes for storage and handling are

considered.

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: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

Skin contact: Areas affected by molten material should quickly be placed under cold running water.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes.

Get medical attention if symptoms occur.

Ingestion: 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 of water to drink. Do not induce vomiting unless directed

to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

No significant symptoms are expected due to the non-classification of this product.

Potential acute health effects

Eye contact: No known significant effects or critical hazards Inhalation: No known significant effects or critical hazards Skin Contact: No known significant effects or critical hazards Ingestion: No known significant effects or critical hazards

Over-exposure signs/symptom:

Eye contact: No specific data Inhalation: No specific data Skin Contact: No specific data Ingestion: No specific data

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. 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.

Water spray, Foam (specifically trained personnel only), water fog

(specifically trained personnel only), dry chemical powder.

Unsuitable extinguishing media: None Known

5.2 Specific hazards arising from the substance or mixture

Hazards from the substance: Harmful Vapours. Evolution of fumes / fog. The substances/groups of

substances mentioned can be released in case of fire.

Hazardous combustion products: None Known.

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 selfcontained 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: Non Provided

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personnel: High risk of slipping due to leakage/ spillage of product. Do not walk

through spilt material. Put on appropriate personal protective equipment. Use personal protective clothing. Information regarding

personal protective measures see Chapter 8.

6.2 Environmental Precautions: Avoid dispersal of spilt material. Inform the relevant authorities of the

product has caused environmental pollution (sewers, waterways, soil or air) Contain contaminated water. Do no discharge into drains/surface

waters/groundwaters.

6.3 Methods and Materials for containment and cleaning up

Spill: Stop leak if without risk. Move containers away from spill area.

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).

7.1 Precautions for safe handling: No special precautions necessary provided product is

used correctly.

Protection against fire and explosion: No special precautions necessary

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a cool place. The product is not damaged by low temperatures or by frost. Protect from temperatures above 70°C. Properties of this product change irreversibly on

exceeding the limit temperature.

7.3 Specific end use(s)

Recommendations:

Industrial sector specific

solutions: Not available

8. EXPOSURE CONTROLS AND 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:

Product / Ingredient Name	Exposure Limit Values		
None	None		

Recommended monitoring procedures: None

8.2 Exposure Controls

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are

close to the workstation location.

Eye / Face Protection: Safety eyewear complying with an approved standard should be used

when a risk assessment indicates this is necessary to avoid exposure to

liquid splashed.

Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved

standard (EN 374) should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Suitable materials also with prolonged, direct contact (recommended: Protective Index 6, corresponding > 480minutes of permeation time according to

EN 374): nitrile rubber (NBR) – 0.4mm coating thickness.

Body Protection: Personal Protective Equipment for the body should be selected based on

the task begin 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 begin performed and the risks involved and should be approved by a specialist before handling this

product.

Respiratory Protection: In case of vapour/ aerosol release. Particle filter with medium

efficiency for solid and liquid particles 9e.g. EN 143 or 149, Type P2 or

FFP2.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be

checked to ensure they comply with the requirements of environmental protections legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to

reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical State: Liquid

Colour: Colourless to Yellowish
Odour: Product Specific
Odour Threshold: Not Available

pH: Approx. 7 [DIN EN 1262] Solidification Temperature: Not Available

Initial Boiling point and

boiling range: > 200°C (The product decomposes)

Flash Point: > 100°C
Evaporation Rate: Not Available
Flammability: Not self-igniting
Burning Time: Not Applicable
Burning Rate: Not Applicable

Upper / Lower flammability or

explosive limits: Not Available

Vapour Pressure: < 0.1 hPa (20°C) (DIN 51794)

Vapour Density: Not Available

Relative Density: 1.03 g/cm³ @ 23°C (59F)

Solubility (ies): Soluble in water

Partition Coefficient:

 $\begin{array}{lll} \text{n-octanol/water:} & \text{Not Available} \\ \text{Ignition Temperature:} & > 200 ^{\circ}\text{C} \\ \text{Decomposition Temperature:} & > 300 ^{\circ}\text{C} \\ \text{Explosive Properties:} & \text{Not explosive.} \\ \text{Oxidising Properties:} & \text{Not Available.} \\ \text{Viscosity:} & \text{Not Applicable} \\ \end{array}$

9.2 Other Information

Miscibility with water: partly miscible / hygroscopic

10. STABILITY AND REACTIVITY

10.1 Reactivity: No hazardous reactions if stored and handled as prescribed/indicated.

Corrosive effects to metal are not anticipated.

10.2 Chemical Stability: The product is stable if stored and handled as prescribed/indicated

10.3 Possibility of hazardous

reactions: No hazardous reactions when stored and handled as prescribed/

indicated.

10.4 Conditions to Avoid: Avoid humidity

10.5 Incompatible Materials: Strong oxidising agents, strong bases, strong acids, halogens, reactive

chemicals, atmospheric moisture

10.6 Hazardous decomposition

products: No hazardous decomposition products when stored and handled as

prescribed/indicated.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects

Acute Toxicity

Product / Ingredient Name	Result	Species	Dose	Exposure
Oxirane, methyl-, polymer	LD50	Rat	> 2000 mg/kg	
with oxirane				

Conclusion / Summary: Not Available

Skin Irritation / Corrosion

Non – Irritant (Draize test)

Serious Eye Damage / Irritation

Non-Irritant (Draize Test)

Respiratory / Skin Sensitisation

Non-Sensitizing

Information on the likely

routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation

Potential acute health effects:

Eye Contact: No known significant effects or critical hazards
Inhalation: No known significant effects or critical hazards
Skin Contact: No known significant effects or critical hazards
Ingestion: No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:No Specific DataIngestion:No Specific DataSkin Contact:No Specific DataEye Contact:No Specific Data

Delayed and immediate effects and also chronic effects from short and long term exposure

Short Term Exposure

Potential immediate effects: Not Available Potential delayed effects: Not Available

Long Term Exposure

Potential immediate effects: Not Available

Potential delayed effects: Not Available

Potential Chronic Health Effects: Not Available

Conclusion / Summary: Not Available

General: No known significant effects or critical hazards
Carcinogenicity: Not listed as carcinogenic by OSHA, NTP or IARC
Mutagenicity: No known significant effects or critical hazards
Teratogenicity: No known significant effects or critical hazards
Developmental Effects: No known significant effects or critical hazards
Fertility Effects: No known significant effects or critical hazards

Other Information: Not Available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product / Ingredient Name	Result	Species	Dose	Exposure
Oxirane, methyl-, polymer	LC50	Fish	> 100 mg/L	96 Hours
with oxirane	EC50	Aquatic	> 100 mg/L	48 Hours
		Invertebres		
	EC50	Aquatic	> 100 mg/L	72 Hours
		Plants		

Conclusion / Summary: Inhibition of degradation activity in activated sludge is not to

be anticipated during correct introduction of low

concentrations.

12.2 Persistence and degradability: < 60% CO₂ formation relative to the theoretical value (28 d)

(OECD 301B; ISO 9439; 92/69/EEC, C.4-C) Readily

Biodegradable.

12.3 Bioaccumulative Potential: Based on its structural properties, the polymer is not

biologically available. Accumulation in organisms is not to be

expected.

12.4 Mobility in Soil

Soil /water partition

coefficient (K_{oc}): Not Available

Mobility: The substance will not evaporate into the atmosphere from the

water surface. Adsorption to solid soil phase is possible.

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 12.7 Additional Information: Chemical Oxygen Demand (COD): 2150 mg/g

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

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: The UK Environmental Protection (Duty of Care) Regulations (EP) and

amendments should be noted (United Kingdom)

Packaging: Uncontaminated packaging can be reused. Packs that cannot be cleaned

should be disposed of in the same manner as the contents.

Methods of disposal: The generation of waste should be avoided or minimised wherever

possible. Waste packaging should be recycled, Incineration or landfill

should only be considered when recycling is not feasible.

Special Precautions: This material and its container must be disposed of in a safe way.

Empty containers or liners may retain some product residues.

14. TRANSPORT INFORMATION

	ADR / RID	AND / ADNR	IMDG	IATA
14.1 UN Number	Not Regulated	Not Regulated	Not Regulated	Not Regulated
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

The data should be considered when making any assessment under the control of Substances Hazardous to Health Regulations (COSHH) and related guidance, for example, 'COSHH Essentials' (United Kingdom)

15.2 Chemical Safety Assessment: Not Required

16. OTHER INFORMATION

Not to be used as an aerosol.

Information on intended use: This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

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Version:

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^{*} Indicates information that has changed from previously issued version