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## MATERIAL SAFETY DATA SHEET

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### SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier:

**Agrosurf<sup>®</sup> NEC38**

**Product name** Agrosurf NEC38  
**EC number** Polymer  
**Product description** Surfactant

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

**Product use:** Surfactant

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

**Lankem Ltd**  
Charles Street  
Dukinfield  
Cheshire  
UNITED KINGDOM  
SK16 4SD

Telephone +44 (0) 161 343 3355  
Fax +44 (0) 161 343 3366  
E-mail technical@lankem.co.uk

#### 1.4 Emergency telephone number

Day 0161 343 3355 Night 07932 007892

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**  
Eye Dam. 1, H318; Acute toxicity 4(oral), H302

**Classification according to Directive 67/548/EEC [DSD]**  
Xi; R41; R22;

#### 2.2 Label elements

##### Hazard pictograms



Signal word: Danger  
Hazard statements: Causes serious eye damage

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Signal word: Warning  
Hazard statements: Harmful if swallowed

### Precautionary statements

Prevention: Wear eye or face protection. Do not eat, drink or smoke when using this product. Wash with plenty of water and soap thoroughly after handling.

Response: 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 CENTRE or physician. IF SWALLOWED: rinse mouth

Storage: Not applicable

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

Supplemental label elements: Not applicable

### Special packaging requirements

Containers to be fitted with child resistant fastenings: Not applicable  
Tactile warning of danger: Not applicable

### 2.3 Other hazards

**Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006 Annex XIII**

PBT: Not available  
P: Not available  
B: Not available  
T: Not available

**Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006 Annex XIII**

vPvB: Not available  
vP: Not available  
vB: Not available

**Other hazards which do not result in classification:** Not available

<b>SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS</b>
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### 3.1 Substances

**Composition** : Non-ionic surfactant  
**EC** : Polymer  
**Concentration** : ~90%  
**Classification:** **(EC) 1272/2008 [CLP/GHS] :** Eye Dam. 1, H318; Acute toxicity 4(oral), H302  
**67/548/EEC:** Xi; R41; R22;

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There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Inhalation:** Get medical attention immediately. Call a poison centre or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin:** Get medical attention immediately. Call a poison centre or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eyes:** Get medical attention immediately. Call a poison centre or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Ingestion:** Get medical attention immediately. Call a poison centre or physician. Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**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

##### Potential acute health effects

Eye contact: Causes serious eye damage  
Inhalation: No specific data  
Skin contact: No known significant effects or critical hazards  
Ingestion: May cause burns to mouth, throat and stomach

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### Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include pain, watering, redness  
Inhalation: No specific data  
Skin contact: Adverse symptoms may include pain, irritation, redness, blistering  
Ingestion: Adverse symptoms may include stomach pains

### 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:** Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media:** Water spray, dry powder and foam

**Unsuitable extinguishing media:** None known

### 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. Evolution of fumes/fog.

**Hazardous thermal decomposition products:** Decomposition products may include carbon dioxide and carbon monoxide

### 5.3 Advice for fire-fighters

**Special precautions 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.

## 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.

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**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).

### 6.3 Methods and materials 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.

**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 (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

### 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.

<b>SECTION 7: HANDLING AND STORAGE</b>
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### 7.1 Precautions for safe handling

**Protective measures:** Put on appropriate protective equipment (see section 8). Do not breathe vapour or mist. DO NOT ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in original container or an approved alternative made from compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Only launder packaging using an approved packaging recycler.

**Advice on general occupational hygiene:** Eating, drinking and smoking should be prohibited in 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 advice on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities:** Store between 5 to 40°C (41 to 104°F). Protect from temperatures above 70°C, properties of the product change irreversibly on exceeding the limit temperature. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool well ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Always keep container tightly closed and sealed. Containers that have been opened must be tightly resealed and held in an upright position. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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### 7.3 Specific end use(s): Industrial applications:

This product has been designed to operate as a surfactant and may offer one or more of the following properties: wetting, foaming, emulsification, dispersing and detergency. The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

<b>SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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### 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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

**Derived effect levels:** No DELs available

**Predicted effect concentrations:** No PECs available

### 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

**Occupational exposure controls:** No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

### Individual protection measures

**Eye protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.

**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. 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

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contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**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.

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Clear, colourless to yellow liquid at 20°C
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not available
<b>pH:</b>	7 (5% aqueous)
<b>Melting point:</b>	<5°C
<b>Initial Boiling point and boiling range:</b>	Not available
<b>Flash point:</b>	>100°C
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid/gas):</b>	Not self-igniting
<b>Upper/lower flammability or explosive limits:</b>	Not available
<b>Vapour pressure:</b>	<0.1 hPa at 20°C
<b>Vapour density:</b>	Not available
<b>Relative density:</b>	0.98 at 23°C
<b>Solubility:</b>	Soluble in water
<b>Partition coefficient n-octanol/water:</b>	Not available
<b>Auto-ignition temperature:</b>	>200°C
<b>Decomposition temperature:</b>	>300°C
<b>Viscosity:</b>	120 mPa.s at 23°C

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**Explosive properties:** Not available

**Oxidising properties:** Not available

### 9.2 Other information

**Density:** 1.02g/cm<sup>3</sup> at 23°C

### SECTION 10: STABILITY AND REACTIVITY

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

**10.2 Chemical stability:** The product is stable if stored and handled as prescribed/indicated.

#### 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:** Avoid contact with caustics, halogens, alkalines, acids and reactive chemicals

#### 10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

##### Acute toxicity

**Analysis:** LD50 (oral)  
**Species:** Rat  
**Dose:** 500 – 2000 mg/kg

**Skin corrosion/irritation:** rabbit – non-irritant (OECD Guideline 404)

**Serious eye damage/irritation:** rabbit – irritant (OECD Guideline 405)

**The product has not been tested. The statement has been derived from products of a similar structure or composition.**

##### Germ cell mutagenicity

##### Carcinogenicity

##### Reproductive toxicity

##### Teratogenicity

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

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

##### Aspiration hazard

Not available



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### Information on the likely routes of exposure and health effects:

<b>Inhalation:</b>	May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.
<b>Ingestion:</b>	May cause burns to mouth, throat and stomach
<b>Skin contact:</b>	No known significant effects or critical hazards
<b>Eye contact:</b>	Causes serious eye damage

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

<b>Inhalation:</b>	No specific data
<b>Ingestion:</b>	Adverse symptoms may include stomach pains
<b>Skin contact:</b>	Adverse symptoms may include pain, irritation, redness, blistering
<b>Eye contact:</b>	Adverse symptoms may include pain, watering, redness

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

Not available

### Information on acute and chronic health effects

<b>General</b> <b>Carcinogenicity</b> <b>Mutagenicity</b> <b>Teratogenicity</b> <b>Developmental effects</b> <b>Fertility effects</b>	No known significant effects or critical hazards
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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish:	LC50 (96 h) 1 - 10 mg/l, <i>Leuciscus idus</i>
Aquatic invertebrates:	EC50 (48 h) 1 - 10 mg/l
Aquatic plants:	EC50 (72 h) 1 - 10 mg/l
Microorganisms/Effect on activated sludge:	EC10 (17 h) > 10,000 mg/l (DIN 38412 Part 8)

**Please note the above results are derived from the properties of the individual components.**

### 12.2 Persistence and degradability

Product/ingredient (Similar material)	Aquatic half-life	Photolysis	Biodegradability
	-	-	Readily Biodegradable

**12.3 Bioaccumulative potential:** Accumulation in organisms is not to be expected

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### 12.4 Mobility in soil:

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: No  
vPvB: No

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

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Method of disposal:** The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. 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.

**Hazardous waste:** The classification of the product may meet the criteria for hazardous waste.

**European waste Catalogue:** The relevant EU Directives and local, regional and national regulations must be complied with. It is among the tasks of the end user to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste catalogue. It is recommended that the details be agreed with the waste disposer responsible.

### Packaging

**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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: TRANSPORT INFORMATION

The following apply to all four transport modes (ADR/RID, ADN/ADNR, IMDG, IATA):

- 14.1 UN Number:** Not regulated
- 14.2 UN proper shipping name:** Not applicable
- 14.3 Transport hazard class:** Not applicable
- 14.4 Packing group:** Not applicable
- 14.5 Environmental hazards:** None

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**14.6 Special precautions for user:** Not available

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:** Not applicable

### 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 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

#### Other EU regulations

<b>Europe inventory:</b>	All components are listed or exempted
<b>Black List chemicals:</b>	Not listed
<b>Priority List chemicals:</b>	Not listed
<b>Integrated pollution prevention and control list (IPPC) – Air:</b>	Not listed
<b>Integrated pollution prevention and control list (IPPC) – Water:</b>	Not listed

#### National Regulations

**References:** The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974.

#### International regulations

<b>Chemical Weapons Convention List Schedule I Chemicals:</b>	Not listed
<b>Chemical Weapons Convention List Schedule II Chemicals:</b>	Not listed
<b>Chemical Weapons Convention List Schedule III Chemicals:</b>	Not listed

**15.2 Chemical safety Assessment:** Not yet completed

### SECTION 16: OTHER INFORMATION

#### Version 1

**Date of Issue: July 2013**

This MSDS has been prepared according to REACH regulations ANNEX II

This information only concerns the above-mentioned product as supplied and may not be valid if used with other product(s) or in any process. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.