
MATERIAL SAFETY DATA SHEET

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

1.1 Product identifier:

Agrosurf[®] NEC32

Product name Agrosurf NEC32
EC number Polymer
CAS number 78330-21-9
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

MATERIAL SAFETY DATA SHEET



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

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS
--

3.1 Substances

Composition : Alcohols, C11-14-iso-C13 rich, ethoxylated
CAS No : 78330-21-9
EC : Polymer
Concentration : ~80%
Classification: **(EC) 1272/2008 [CLP/GHS] :** Eye Dam. 1, H318; Acute toxicity 4(oral), H302
67/548/EEC: Xi; R41; R22;

MATERIAL SAFETY DATA SHEET

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

MATERIAL SAFETY DATA SHEET

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.

MATERIAL SAFETY DATA SHEET

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.

SECTION 7: HANDLING AND STORAGE
--

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.

MATERIAL SAFETY DATA SHEET

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.

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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

MATERIAL SAFETY DATA SHEET

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 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Clear, colourless liquid at 20°C
Odour:	Characteristic
Odour threshold:	Not available
pH:	7 (1% aqueous)
Melting point:	<15°C
Initial Boiling point and boiling range:	>150°C

MATERIAL SAFETY DATA SHEET

Flash point:	>100°C
Evaporation rate:	Not available
Flammability (solid/gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Low because of its high boiling point
Vapour density:	Not available
Relative density:	Not available
Solubility:	Soluble in water
Partition coefficient n-octanol/water:	Not available
Auto-ignition temperature:	>200°C
Decomposition temperature:	Not available
Viscosity:	200cP at 25°C
Explosive properties:	Not available
Oxidising properties:	Not available
9.2 Other information	
Density:	1.0g/cm ³ at 60°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: No specific data

10.6 Hazardous decomposition products:

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

MATERIAL SAFETY DATA SHEET

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Analysis: - LD50 (oral)
Species: - rat
Dose: - >2000mg/kg

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

Serious eye damage/irritation: rabbit – irreversible damage (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

Information on the likely routes of exposure and health effects:

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

Symptoms related to the physical, chemical and toxicological characteristics

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

General
Carcinogenicity
Mutagenicity
Teratogenicity
Developmental effects
Fertility effects

No known significant effects or critical hazards

MATERIAL SAFETY DATA SHEET

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish:	LC50 (96 h) 10 - 100 mg/l, <i>Leuciscus idus</i>
Aquatic invertebrates:	EC50 (48 h) 10 - 100 mg/l
Aquatic plants:	EC50 (72 h) 10 - 100 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 products with similar chemical character.

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil soil/water partition coefficient and Mobility information not available

12.5 Results of PBT and vPvB assessment

PBT: Not available
vPvB: Not available

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.

MATERIAL SAFETY DATA SHEET

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
- 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**Europe inventory:****Black List chemicals:****Priority List chemicals:****Integrated pollution prevention and control list (IPPC) – Air:****Integrated pollution prevention and control list (IPPC) – Water:**

All components are listed or exempted
Not listed
Not listed
Not listed
Not listed

MATERIAL SAFETY DATA SHEET

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

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 yet completed
---	-------------------

SECTION 16: OTHER INFORMATION

Version 1

Date of Issue: February 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.