SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	BIO-TERGE AS-90 COARSE
Chemical Name:	SODIUM C14-16 OLEFIN SULFONATE
UFI:	(Only for EU), UD55-QAW9-M014-2FCF
Product code	SKU S (B) 02300
Issue date	21-February-2018
Version number	02
Revision date Supersedes date	09-February-2023 21-February-2018

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

Identified uses	Industrial use Anionic surfactant
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Address	AROMA TRADING LIMITED Unit 3 Quatro Park, Tanners Drive Milton Keynes MK14 5FJ ENGLAND
Telephone	+ 44 (0) 1908 334100
Fax	+ 44 (0) 1908 211376
E-mail	sales@aromatrading.com
Contact person	See email address

1.4. Emergency telephone number

General in EU	112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Guy's Hospital Poisons Unit	(00 44)(1 71) 6 35 91 91

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

UFI:	(Only for EU), UD55-QAW9-M014-2FCF
Contains:	Sodium (xylenes and 4-ethylbenzene)sulfonates, Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts
Hazard pictograms	
Signal word	Danger

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary statements

Prevention

P264	Wash thoroughly after handling.

P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Storage

Disposal

Supplemental label information None.

2.3. Other hazards This mixture does not contain substances that are assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	80 - < 90	- 931-534-0	-	-	
Classification: Skin Irrit. 2;H315, Eye Dam. 1;H318					
Specific Concentration Limits: Skin Irrit. 2;H315: C >= 5 %, Eye Dam. 1;H318: C > 38 %, Eye Irrit. 2;H319: 5 % < C <= 38 %					
Sodium (xylenes and 4-ethylbenzene)sulfonates	5 - < 10	- 701-037-1	-	-	
Classification: Eye Irrit. 2;H319					

Composition comments See special hints in section 15.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide (CO_2). Dry chemicals. Water fog.

Large Fires: Extinguish with water fog.

Unsuitable extinguishing media Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

In the event of fire the following can be released: Carbon oxides (COx)
Sulphur Oxides (SOx).

5.3. Advice for firefighters

Special protective equipment for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Keep unnecessary personnel away. Wear appropriate personal protective equipment. Keep people away from and upwind of spill/leak.

For emergency responders: Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid generation and spreading of dust. Ensure adequate ventilation. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions: Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections: For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling: Provide adequate ventilation. Do not get this material in contact with eyes. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities: Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s): Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits: No exposure limits noted for ingredient(s).

Biological limit values: No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures: Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General Population

Components	Value	Assessment factor	Notes
Sodium (xylenes and 4-ethylbenzene)sulfonates (CAS -)			
Long-term, Local, Dermal	0.048 mg/cm2	10	Repeated dose toxicity
Long-term, Systemic, Dermal	68.1 mg/kg bw/day	200	Repeated dose toxicity
Long-term, Systemic, Inhalation	6.6 mg/m3	50	Repeated dose toxicity
Long-term, Systemic, Oral	3.8 mg/kg bw/day	200	Repeated dose toxicity
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts (CAS -)			
Long-term, Systemic, Dermal	1295 mg/kg bw/day		
Long-term, Systemic, Inhalation	45.04 mg/m3		
Long-term, Systemic, Oral	12.95 mg/kg bw/day		

Workers

Components	Value	Assessment factor	Notes
Sodium (xylenes and 4-ethylbenzene)sulfonates (CAS -)			
Long-term, Local, Dermal	0.096 mg/cm2	5	Repeated dose toxicity
Long-term, Systemic, Dermal	136.25 mg/kg bw/day	100	Repeated dose toxicity
Long-term, Systemic, Inhalation	26.9 mg/m3	25	Repeated dose toxicity

Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts (CAS -)

Long-term, Systemic, Dermal	2158.33 mg/kg bw/day
Long-term, Systemic, Inhalation	152.22 mg/m3

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Sodium (xylenes and 4-ethylbenzene)sulfonates (CAS -)			
Freshwater	0.23 mg/l	1000	
Marine water	0.023 mg/l	10000	
Sediment (freshwater)	0.862 mg/kg		
Sediment (marine water)	0.086 mg/kg		
Soil	0.037 mg/kg		
STP	100 mg/l	10	
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts (CAS -)			
Freshwater	0.024 mg/l	50	
Intermittent releases	0.0197 mg/l	100	
Marine water	0.0024 mg/l	500	
Sediment (freshwater)	0.767 mg/kg	1000	
Sediment (marine water)	0.0767 mg/kg	10000	
Soil	1.21 mg/kg	100	
STP	4 mg/l	10	

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. PVC gloves are recommended.

- Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.

Form beads.

Colour White, Light yellow.

Odour Slight.

Odour threshold Not available.

pH 8 - 10 @ 50 g/l (10°C)

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	To avoid thermal decomposition, do not overheat. Contact with incompatible materials.
10.5. Incompatible materials	Avoid contact with acids and oxidising substances. Alkalis.
10.6. Hazardous decomposition products	Carbon oxides. (COx) Sulphur Oxides (SOx).

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Eye contact	Causes serious eye damage.
Skin contact	Causes skin irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity

Product	Species	Test Results
BIO-TERGE AS-90 COARSE		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (estimated)
Inhalation		
LC50	Rat	57.7 - 65 mg/kg (estimated)
Oral		
LD50	Rat	2236 - 2551 mg/kg (estimated)

Components	Species	Test Results
Sodium (xylenes and 4-ethylbenzene)sulfonates		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg (OECD 402)
Inhalation		
LC50	Rat	> 6410 mg/m3 (OECD 403)

Components	Species	Test Results
Oral		
LD50	Rat	> 7000 mg/kg (OECD 401)
Subchronic		
Oral		
NOAEL	Rat	763 mg/kg bw/day, 90 days (OECD 408)
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts		
Acute		
Dermal		
LD50	Rabbit	6300 mg/kg (OECD 402)
Inhalation		
Aerosol		
LC50	Rat	> 52 mg/l, 4 hours (OECD 403)
Oral		
LD50	Rat	2079 mg/kg (OECD 401)
Chronic		
Oral		
NOAEL	Rat	>= 259 mg/kg bw/day, 104 weeks

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
BIO-TERGE AS-90 COARSE			
Aquatic			
Acute			
Algae	EC50	Algae	1500 mg/l, 72 hours estimated
	IC50	Algae	> 2.19 - < 2.46 mg/l (estimated)
Crustacea	EC50	Daphnia	> 5.03 - < 5.66 mg/l (estimated)
			4.2945 mg/l, 48 hours estimated
Fish	LC50	Fish	> 4.66 - < 5.25 mg/l (estimated)

Components		Species	Test Results
Sodium (xylenes and 4-ethylbenzene)sulfonates			
Chronic			
Other	NOEC	Micro-organisms	>= 1000 mg/l, 3 hours (OECD 209)
Aquatic			
Acute			
Algae	IC50	Algae	>= 230 mg/l, 96 hours (EPA OTS 797.1050)

Components		Species	Test Results
Crustacea	EC50	Daphnia magna	> 1000 mg/l, 48 hours (EPAOTS 797.1300)
Fish	LC50	Oncorhynchus mykiss	> 1000 mg/l, 96 hours (EPA-OTS 5797.1400)
Chronic			
Algae	NOEC	Algae	31 mg/l, 96 hours

Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts

Aquatic			
Acute			
Algae	LC50	Marine water algae	1.97 mg/l, 72 hours (ISO 10253)
Crustacea	EC50	Calanoid copepod (Acartia tonsa)	2.08 mg/l, 48 hours (ISO/TC 147/SC5/WG2)
		Ceriodaphnia dubia	4.53 mg/l, 48 hours (OECD 202)
Fish	LC50	Danio rerio	4.2 mg/l, 96 hours (OECD 403)
Chronic			
Algae	NOEC	Marine water algae	1.2 mg/l, 72 hours (ISO 10253)
Crustacea	NOEC	Daphnia magna	2.42 mg/l, 21 days (OECD 211)

12.2. Persistence and degradability Readily biodegradable.

Biodegradability

Percent Degradation (Aerobic Biodegradation)

Sodium (xylenes and 4-ethylbenzene)sulfonates	99.8 % (OECD 301 B) Test Duration: 28 days
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	>= 80 % (OECD 301 B) Test Duration: 28 days

12.3. Bioaccumulative potential No data available.

Partition coefficient n-octanol/water (log Kow)

Sodium (xylenes and 4-ethylbenzene)sulfonates	-3.12 @ 20 °C
Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	-1.3 @ 20°C (EU Method A.8)

Bioconcentration factor (BCF)

Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	70.8 (QSAR)

12.4. Mobility in soil No data available.

Adsorption

Soil/Sediment Sorption - Log Koc

Sulfonic acids, C14-16 (even numbered)-alkane hydroxy and C14-16 (even numbered)-alkene, sodium salts	0.206

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

General Not regulated as dangerous goods.

ADR

14.1. UN number	Not available.
14.2. UN proper shipping name	Not available.
14.3. Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

RID

14.1. UN number	Not available.
14.2. UN proper shipping name	Not available.
14.3. Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

IATA

14.1. UN number	Not available.
14.2. UN proper shipping name	Not available.
14.3. Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

IMDG

14.1. UN number	Not available.
14.2. UN proper shipping name	Not available.
14.3. Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
14.4. Packing group	Not available.
14.5. Environmental hazards	
Marine pollutant	No.
EmS	Not available.
14.6. Special precautions for user	Not available.

Segregation group : None

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.
General information	Not regulated as dangerous goods.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Retained direct EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.
This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
Alternative CAS (purpose of safety) of : EC# 931-534-0 = CAS# 68439-57-6.

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out (mixture). Exposure scenarios relevant for this material are annexed and distributed as seperate document to this eSDS.

SECTION 16: Other information

List of abbreviations

REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006)
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008
CAS: Chemical Abstract Service
EINECS: European Inventory of Existing Commercial Chemical Substances
PBT: Persistent, bioaccumulative, toxic
vPvB: very Persistent, very Bioaccumulative
BLV: Biological Limit Value
LD50: Lethal Dose 50%
EC50: Effective Concentration 50%
LC50: Lethal Concentration 50%
IC50: Inhibition Concentration 50%
ES: Exposure scenario
CSR: Chemical Safety Report
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
ADR: European agreement concerning the international carriage of dangerous goods by road
RID: Regulations concerning the international carriage of dangerous goods by rail
IMDG Code: International Maritime Dangerous Goods Code
IATA: International Air Transport Association

References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation.

Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Training information	Follow training instructions when handling this material.
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