

# SAFETY DATA SHEET STAR SEPARATOR DISCLEAN

## PRODUCT CODE: 00910019

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1. Product identifier			
Product name	STAR SEPARATOR DISCLEAN		
Product number	00910019		
1.2. Relevant identified uses o	of the substance or mixture and uses advised against		
Identified uses	Star Separator Disclean is a powerful cleaning solution that has been designed specifically to remove hard oil and carbon deposits from fuel and lube oil centrifugal separators.		
1.3. Details of the supplier of t	he safety data sheet		
Supplier	STAR International Star House Turbine Business Park Turbine Road Birkenhead Merseyside CH41 9BA Tel: +44 (0) 1244 504 500 Fax: +44 (0) 1244 504 504 www.star-international.co.uk		
1.4. Emergency telephone nur	mber		
Emergency telephone	+44 (0) 1244 504 500 (Office hours only)		
SECTION 2: Hazards identific	ation		
2.1. Classification of the substance or mixture			
Classification (EC 1272/2008)			
Physical hazards	Met. Corr. 1 - H290		
Health hazards	Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318		
Environmental hazards	Not Classified		
2.2. Label elements Hazard pictograms			
Signal word	Danger		
Hazard statements	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.		



Precautionary statements	P260 Do not breathe vapour/ spray.
	P264 Wash contaminated skin thoroughly after handling.
	P270 Do not eat, drink or smoke when using this product.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P390 Absorb spillage to prevent material damage.
	P406 Store in a corrosion-resistant container with a resistant inner liner.
	P501 Dispose of contents/ container in accordance with national regulations.
Contains	PHOSPHORIC ACID , SURFAC UN65/95
Supplementary precautionary	P234 Keep only in original packaging.
statements	P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
	P310 Immediately call a POISON CENTER/ doctor.
	P321 Specific treatment (see medical advice on this label).
	P363 Wash contaminated clothing before reuse.
	P405 Store locked up.
2.3. Other hazards	

Not available.

ion on ingredients	
	10-30%
EC number: 231-633-2	REACH registration number: 01- 2119485924-24-XXXX
	5-10%
EC number: 203-961-6	REACH registration number: 01- 2119475104-44-XXXX
	1-5%
	EC number: 231-633-2



The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

	s and Hazard Statements are Displayed in Section 16.	
SECTION 4: First aid measure	98	
4.1. Description of first aid me	asures	
Inhalation	Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately.	
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.	
Skin contact	Remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.	
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.	
4.2. Most important symptoms	and effects, both acute and delayed	
Ingestion	Harmful if swallowed.	
Skin contact	Causes severe skin burns and eye damage.	
Eye contact	Causes severe skin burns and eye damage.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
Notes for the doctor	No information available.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.	
5.2. Special hazards arising from	om the substance or mixture	
Specific hazards	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3.	
5.3. Advice for firefighters		
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.	
SECTION 6: Accidental release	e measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin and eyes. Provide adequate ventilation.	
6.2. Environmental precaution	<u>S</u>	
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.	
6.3. Methods and material for	containment and cleaning up	
Methods for cleaning up	Neutralise spilled material with crushed limestone, slaked lime (calcium hydroxide), soda ash (sodium carbonate) or sodium bicarbonate. Absorb spillage to prevent material damage. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.	

### 6.4. Reference to other sections



**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Usage precautions	Provide adequate ventilation.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 10°C and 40°C.	
Storage class	Corrosive storage.	
7.3. Specific end use(s)		
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.	
SECTION 8: Exposure controls/Personal protection		
8.1. Control parameters		

Occupational exposure limits PHOSPHORIC ACID

Long-term exposure limit (8-hour TWA): WEL 1 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

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Long-term exposure limit (8-hour TWA): WEL 10 ppm 67,5 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 15 ppm 101,2 mg/m<sup>3</sup> WEL = Workplace Exposure Limit

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DNEL	Workers - Inhalation; Short term local effects: 101.2 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 83 mg/kg/day Workers - Inhalation; Long term systemic effects: 67.5 mg/m <sup>3</sup> Workers - Inhalation; Long term local effects: 67.5 mg/m <sup>3</sup> Workers - Inhalation; Short term local effects: 60.7 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 50 mg/kg/day Consumer - Inhalation; Long term systemic effects: 40.5 mg/m <sup>3</sup> Consumer - Inhalation; Long term systemic effects: 5 mg/kg/day Consumer - Inhalation; Long term systemic effects: 5 mg/kg/day
PNEC	<ul> <li>Fresh water; 1.1 mg/l</li> <li>Sediment (Freshwater); 4.4 mg/kg</li> <li>Intermittent release; 11 mg/l</li> <li>Sediment (Marinewater); 0.44 mg/kg</li> <li>marine water; 0.1 mg/l</li> <li>STP; 200 mg/l</li> <li>Soil; 0.32 mg/kg</li> </ul>

#### 8.2. Exposure controls

#### Protective equipment





Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. filter A/P2 EN 136/140/141/145/143/149

### SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

9.1. mormation on basic phys	sical and chemical properties		
Appearance	Liquid.		
Colour	Colourless.		
Odour	Odourless.		
рН	pH (concentrated solution): <1		
Relative density	~1.200 @ 20°C		
Solubility(ies)	Miscible with water.		
9.2. Other information			
Other information	Not available.		
SECTION 10: Stability and rea	activity		
10.1. Reactivity			
Reactivity	No information available.		
10.2. Chemical stability			
Stability	Stable at normal ambient temperatures.		
10.3. Possibility of hazardous	reactions		
Possibility of hazardous reactions	Not available.		
10.4. Conditions to avoid			
Conditions to avoid	Avoid excessive heat for prolonged periods of time.		
10.5. Incompatible materials			
Materials to avoid	Strong acids.		
10.6. Hazardous decomposition	on products		
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.		



## SECTION 11: Toxicological information

	Allociogical inite				
11.1. Information	on toxicologica	al effects			
Acute toxicity - or	ral				
ATE oral (mg/kg)	1	1,739.13			
Skin corrosion/irr					
Skin corrosion/irr	itation	Corrosive	e to skin.		
Serious eye dam	age/irritation				
Serious eye dam	age/irritation	Risk of s	erious damage	to eyes.	
Respiratory sens	itisation				
Respiratory sens	itisation	Based or	n available data	the classification cr	iteria are not met.
Skin sensitisation	<u>1</u>				
Skin sensitisation	ı	Based or	n available data	the classification cr	iteria are not met.
Germ cell mutage	enicity				
Genotoxicity - in	vitro	Based or	n available data	the classification cr	iteria are not met.
Carcinogenicity					
Carcinogenicity		Based or	n available data	the classification cr	iteria are not met.
Reproductive tox	icity				
Reproductive tox	icity - fertility	Based or	n available data	the classification cr	iteria are not met.
Specific target or	gan toxicity - si	ingle exp	osure		
STOT - single ex	posure	Based or	n available data	the classification cr	iteria are not met.
Specific target or	gan toxicity - re	epeated e	exposure		
STOT - repeated	exposure	Based or	n available data	the classification cr	iteria are not met.
Aspiration hazard	1				
Aspiration hazard	ł	Based or	n available data	the classification cr	iteria are not met
Inhalation		May caus	se respiratory s	stem irritation.	
Ingestion		Harmful i	f swallowed.		
Skin contact		Causes s	severe skin burr	ns and eye damage.	
Eye contact		Causes s	severe skin burr	ns and eye damage.	
Toxicological information on ingredients.					
				PHOSPHORIC A	CID
Δου	te toxicity - ora	J			
Acute toxicity - oral		<u></u>	500.0		
AIE	E oral (mg/kg)		500.0		
				DGMBE SOLVE	INT
Acu	te toxicity - ora	l			
Acu mg/	te toxicity oral kg)	(LD₅o	2,000.0		
Spe	cies		Rat		
Acu	te toxicity - der	mal			



Acute toxicity dermal (LD₅₀ mg/kg)	2,000.0		
Species	Rabbit		
Acute toxicity - inhalation			
Notes (inhalation LC <sub>50</sub> )	>29 ppm, Inhalation, Rat		
Skin corrosion/irritation			
Animal data	Not irritating.		
Serious eye damage/irritatio	on		
Serious eye damage/irritation	Irritating to eyes.		
Respiratory sensitisation			
Respiratory sensitisation	No specific test data are available.		
Skin sensitisation			
Skin sensitisation	Guinea pig maximization test (GPMT) - : Not sensitising.		
Germ cell mutagenicity			
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.		
Carcinogenicity			
Carcinogenicity	No specific test data are available.		
Reproductive toxicity			
Reproductive toxicity - fertility	This substance has no evidence of toxicity to reproduction.		
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.		
Specific target organ toxicity - repeated exposure			
STOT - repeated exposure	Prolonged or repeated exposure may cause the following adverse effects: Liver and/or kidney damage.		
Aspiration hazard			
Aspiration hazard	Not available.		
Inhalation	May cause respiratory system irritation.		
Ingestion	May cause discomfort if swallowed.		
Skin contact	May be slightly irritating to skin.		
Eye contact	Causes serious eye irritation.		
12: Ecological information			

#### Ecotoxicity

SECTION '

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

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**Ecotoxicity** The product components are 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.

### 12.1. Toxicity

Ecological information on ingredients.

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Toxicity	Not considered toxic to fish.
Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 2700 mg/l, Fish LC₅₀, 96 hours: 1300 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 101 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 96 hours: >100 mg/l, Freshwater plants

#### SURFAC UN65/95

#### Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 1 - 10 mg/l, Fish

#### 12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

#### DGMBE SOLVENT

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 80-90%: 28 days
	SURFAC UN65/95

 

 Persistence and degradability
 This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

#### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

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Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient : 0.56

12.4. Mobility in soil

Mobility

Miscible with water.



#### Ecological information on ingredients.

#### DGMBE SOLVENT

Mobility

The product is soluble in water.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB** This product does not contain any substances classified as PBT or vPvB. assessment

#### Ecological information on ingredients.

#### DGMBE SOLVENT

**Results of PBT and vPvB** This substance is not classified as PBT or vPvB according to current EU criteria. **assessment** 

#### 12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

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Other adverse effects No	ot determined.

# SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

General information	When handling waste, the safety precautions applying to handling of the product should be considered.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### **SECTION 14: Transport information**

14.1. UN number	
UN No. (ADR/RID)	1805
UN No. (IMDG)	1805
UN No. (ICAO)	1805
UN No. (ADN)	1805
14.2. UN proper shipping name	
Proper shipping name (ADR/RID)	PHOSPHORIC ACID, SOLUTION
Proper shipping name (IMDG)	PHOSPHORIC ACID, SOLUTION
Proper shipping name (ICAO)	PHOSPHORIC ACID, SOLUTION
Proper shipping name (ADN)	PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es)	
ADR/RID class	8

ADR/RID classification code C1



ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class Transport	8
labels	



### 14.4. Packing group

ADR/RID packing group	ш
IMDG packing group	Ш
ICAO packing group	Ш
ADN packing group	Ш

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

### 14.6. Special precautions for user

IMDG Code segregation group	1. Acids
EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2R
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

#### SECTION 15: Regulatory information

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

EU legislationRegulation (EC) No 1272/2008 of the European Parliament and of the Council of 16<br/>December 2008 on classification, labelling and packaging of substances and mixtures (as<br/>amended).<br/>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18<br/>December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of<br/>Chemicals (REACH) (as amended).<br/>Commission Regulation (EU) No 2015/830 of 28 May 2015.

#### 15.2. Chemical safety assessment

Not available.



## SECTION 16: Other information

General information	Only trained personnel should use this material.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/ Health and Safety Executive (HSE). MARPOL 73/78 Annex II - Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk.
Revision date	14/04/2020
SDS number	21543
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation.
Signature	Auguste Little