

US Distributor

Fuchs Lubricants Co. 17050 Lathrop Avenue

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: RENOCLEAN VR 1021 CXV

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

Identified uses: Cleaning agent/ Cleaner Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier	FUCHS LUBRICANTS (UK) PLC. New Century Street Hanley Stoke-on-Trent, Staffordshire, ST1 5HU UK	Harvey, IL 60426 (708) 333-8900 (800) 255-3924 24 hrs Emergency
Telephone:	+44 (0) 1782 203700	
Contact Person: Telephone: E-mail:	Product Safety department +44 (0) 1782 203700 product.safety@fuchs-oil.com	
1.4 Emergency telephone number:	UK NHS: Dial 111. Ireland NPIS: Dial +353	1 8092566.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

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

Health Hazards		
Skin corrosion	Category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage	Category 1	H318: Causes serious eye damage.
Specific Target Organ Tox Single Exposure	icity - Category 3	H335: May cause respiratory irritation.
Hazard summary Physical Hazards:	No data available.	
2.2 Label Elements Contains:	Monoethanol amine	



Signal Words:	Danger
Hazard Statement(s):	H314: Causes severe skin burns and eye damage. H335: May cause respiratory irritation.
Precautionary Statemen	t
Prevention:	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P310: Immediately call a POISON CENTER/doctor. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
2.3 Other hazards:	By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information:

Mixture based on ionic- and nonionic tensides in combination with stabilizers. This product is applied only as solution or emulsion in water.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
acid, ionic equilibrium with organic bases	Neutralisation product (*)	10,00 - <20,00%		
Monoethanol amine	EINECS: 205-483-3	5,00 - <10,00%	01-2119486455-28	
prim. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	1,00 - <5,00%		
inorganic base, ionic equilibrium with acids	Neutralisation product (*)	1,00 - <5,00%		
acid, ionic equilibrium with organic bases	Neutralisation product (*)	1,00 - <5,00%		
Fatty alcohol, ethoxylated	Polymer	1,00 - <5,00%		
Fatty alcohol, ethoxylated	EC: 500-241-6	1,00 - <5,00%	02-2119630717-36	
alkylammonium carbonate	EC: 451-900-9	0,10 - <1,00%	01-0000019102-83	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. PBT: persistent, bioaccumulative and toxic substance.



vPvB: very persistent and very bioaccumulative substance. (*) Neutralisation product: Equilibrium of Ionic Pairs in aequous solution according to REACH Annex V, 4.

Classification

Chemical name	Identifier	Class	ification
acid, ionic equilibrium with organic bases	Neutralisation product (*)	CLP:	Acute Tox. 4;H302, Eye Irrit. 2;H319, Skin Irrit. 2;H315
Monoethanol amine	EINECS: 205-483-3	CLP:	Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335, Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332, Aquatic Chronic 3;H412
prim. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	CLP:	Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332, Aquatic Chronic 3;H412, Eye Irrit. 2;H319, Skin Irrit. 2;H315
inorganic base, ionic equilibrium with acids	Neutralisation product (*)	CLP:	Acute Tox. 4;H302, Eye Irrit. 2;H319, Skin Irrit. 2;H315
acid, ionic equilibrium with organic bases	Neutralisation product (*)	CLP:	Acute Tox. 4;H312, Eye Irrit. 2;H319, Skin Irrit. 2;H315, Met. Corr. 1;H290
Fatty alcohol, ethoxylated	Polymer	CLP:	Eye Irrit. 2;H319
Fatty alcohol, ethoxylated	EC: 500-241-6	CLP:	Acute Tox. 4;H302
alkylammonium carbonate	EC: 451-900-9	CLP:	Acute Tox. 3;H301, Skin Corr. 1B;H314, Aquatic Acute 1;H400, Aquatic Chronic 2;H411

CLP: Regulation No. 1272/2008.

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures	
General:	Instantly remove any clothing soiled by the product.
4.1 Description of first aid measu	Ires
Inhalation:	If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Supply fresh air; consult doctor in case of symptoms.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Skin Contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Destroy or thoroughly clean contaminated shoes. Get medical attention. Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.
Ingestion:	Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center. Seek medical attention.
4.2 Most important symptoms and effects, both acute and delayed:	Risk of serious damage to eyes. Causes burns.
4.3 Indication of any immediate medical attention and	When handing over this safety data sheet, please make the remark: "Cleaner". Get medical attention if symptoms occur.

special treatment needed



SECTION 5: Firefighting measures		
5.1 Extinguishing media Suitable extinguishing media:	CO2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added	
Unsuitable extinguishing media:	Water with a full water jet.	
5.2 Special hazards arising from the substance or mixture:	During fire, gases hazardous to health may be formed.	
5.3 Advice for firefighters Special fire fighting procedures:	Generally this product is not burnable on account of its water content. Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water inaccordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.	
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
SECTION 6: Accidental release me	easures	
6.1 Personal precautions, protective equipment and emergency procedures:	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.	
6.2 Environmental Precautions:	Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.	
6.3 Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.	
6.4 Reference to other sections:	See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.	
	Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.	
SECTION 7: Handling and storage	:	

7.1 Precautions for safe
handling:Prevent formation of aerosols. Do not eat, drink or smoke when working
with the product. Take usual precautions when handling mineral oil
products or chemical products. Observe good industrial hygiene practices.
Provide adequate ventilation.



7.2 Conditions for safe storage, including any incompatibilities:	Local regulations concerning handling and storage of waterpolluting products have to be followed.
7.3 Specific end use(s):	not applicable
Storage Class:	12, Non-combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values		Source
Monoethanol amine	TWA	1 ppm	2,5 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Monoethanol amine	STEL	3 ppm	7,6 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

8.2 Exposure controls

Appropriate engineering controls:	Provide adequate ventilation. 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.
Individual protection measure	es, such as personal protective equipment
General information:	Wash hands before breaks and after work. 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. The usual precautionary measures should be adhered to inhandling the chemicals or the mineral oil products.
Eye/face protection:	Safety glasses (EN 166) recommended during refilling. Avoid contact with eyes. Wear closed protection glasses.
Skin protection Hand Protection:	Material: Nitrile butyl rubber (NBR). Min. Breakthrough time: >= 480 min Recommended thickness of the material: >= 0,38 mm Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other:	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.



Respiratory Protection:	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
Thermal hazards:	Not known.
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 to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

1 2	• •
Appearance	
Physical state:	liquid
Form:	liquid
Color:	Yellow
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	10,8 (1.000 g/l, 20 °C) 10,0 (20 g/l, 20 °C)
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	not applicable
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)–:	Not applicable for mixtures
Flammability Limit - Lower (%)–:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	1,05 g/ml (15,00 °C) (DIN 51757)
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
Flow time	Value not relevant for classification
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
Other information	No data available.



SECTION 10: Stability and reactivity	
10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Stable under normal use conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely rou Inhalation:	i tes of exposure No data available.
Ingestion:	No data available.
Skin Contact:	Causes severe skin burns.
Eye contact:	Causes serious eye damage.

11.1 Information on toxicological effects

Acute toxicity

Oral Product: Specified substance(s) acid, ionic equilibrium with organic bases	ATEmix: 2.168 mg/kg LD 50 (Rat): 1.100 mg/kg
Monoethanol amine	LD 50 (Rat): 1.515 mg/kg (OECD 401)
prim. alkanolamine, ionic equilibrium with acids	LD 50 (Rat): 1.515 mg/kg (OECD 401)
inorganic base, ionic equilibrium with acids	LD 50 (Rat): 365 mg/kg
Fatty alcohol, ethoxylated	LD 50 (Rat): > 2.001 mg/kg (OECD 401)
alkylammonium carbonate	LD 50 (Rat): 245 mg/kg



Dermal Product: Specified substance(s) acid, ionic equilibrium with organic bases	ATEmix: 8.780 mg/kg LD 50 (Rabbit): > 2.001 mg/kg
Monoethanol amine	LD 50 (Rabbit): 2.504 mg/kg (OECD 402)
prim. alkanolamine, ionic equilibrium with acids	LD 50 (Rabbit): 2.504 mg/kg (OECD 402)
alkylammonium carbonate	LC 50 (Rat): > 2.001 mg/kg
Inhalation Product:	ATEmix: 95,65 mg/l Vapour
Skin Corrosion/Irritation: Product: Specified substance(s) Monoethanol amine	Based on available data, the classification criteria are met.
	Corrosive.
Fatty alcohol, ethoxylated	OECD 404 (Rabbit): Slightly irritating.
alkylammonium carbonate	OECD 404 (Rabbit, 4 h): Corrosive.
Serious Eye Damage/Eye Irr Product: Specified substance(s) Monoethanol amine	itation: Based on available data, the classification criteria are met. Corrosive to skin and eyes.
Fatty alcohol, ethoxylated	OECD 405 (Rabbit): Irritating.
Respiratory or Skin Sensitiz Product:	ation: Skin sensitizer: Based on available data, the classification criteria are not met. Respiratory sensitizer: Based on available data, the classification criteria are not met.
Specified substance(s) Monoethanol amine	, OECD 406-1 (Guinea Pig) Not a skin sensitizer.



Germ Cell Mutagenicity Product: In vitro Specified substance(s)	Based on available data, the classification criteria are not met.	
alkylammonium carbonate	(OECD 473) None.	
Carcinogenicity Product:	Based on available data, the classification criteria are not met.	
Reproductive toxicity Product:	Based on available data, the classification criteria are not met.	
Specific Target Organ Toxicity - Single ExposureProduct:Based on available data, the classification criteria are met.		
Specific Target Organ Toxicity - Repeated ExposureProduct:Based on available data, the classification criteria are not met.		
Aspiration Hazard Product:	Based on available data, the classification criteria are not met.	
Other Adverse Effects:	No data available.	

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity Product:	Based on available data, the classification criteria are not met.
Fish Specified substance(s) acid, ionic equilibrium with organic bases	LC 50 (Fish, 96 h): 122 mg/l
Monoethanol amine	LC 50 (Fish, 96 h): 125 mg/l
prim. alkanolamine, ionic equilibrium with acids	LC 50 (Fish, 96 h): 125 mg/l
Fatty alcohol, ethoxylated	LC 50 (Fish, 96 h): 1,1 mg/l
Fatty alcohol, ethoxylated	LC 50 (Fish, 96 h): > 101 mg/l
alkylammonium carbonate	LC 50 (Fish, 96 h): 0,28 mg/l
Aquatic Invertebrates Specified substance(s) acid, ionic equilibrium with organic bases	EC 50 (Water Flea, 48 h): 68 mg/l
Monoethanol amine	EC 50 (Water Flea, 48 h): 65 mg/l
e Date: 30 10 2013	



prim. alkanolamine, ionic equilibrium with acids	EC 50 (Water Flea, 48 h): 65 mg/l
Fatty alcohol, ethoxylated	EC 50 (Water Flea, 48 h): 1,1 mg/l (OECD 202)
Fatty alcohol, ethoxylated	EC 50 (Water Flea, 48 h): > 101 mg/l
Chronic ToxicityProduct:	Based on available data, the classification criteria are not met.
Fish Specified substance(s) Monoethanol amine	NOEC (Fish, 30 d): 1,2 mg/l
alkylammonium carbonate	NOEC (Fish, 33 d): 0,018 mg/l (OECD 210)
Aquatic Invertebrates Specified substance(s) Monoethanol amine	NOEC (Water Flea, 21 d): 0,85 mg/l (OECD 211)
alkylammonium carbonate	NOEC (Water Flea, 21 d): 0,027 mg/l (OECD 211)
Toxicity to Aquatic Plants Specified substance(s) acid, ionic equilibrium with organic bases	EC 50 (Alga, 72 h): 81 mg/l
Monoethanol amine	EC 50 (Alga, 72 h): 22 mg/l
prim. alkanolamine, ionic equilibrium with acids	EC 50 (Alga, 72 h): 22 mg/l
Fatty alcohol, ethoxylated	EC 50 (Alga, 72 h): 1,1 mg/l (OECD 201)
Fatty alcohol, ethoxylated	EC 50 (Alga, 72 h): > 101 mg/l
12.2 Persistence and Degradabili	ty

Biodegradation Product:	Not applicable for mixtures
Specified substance(s) Monoethanol amine	> 90 % (21 d, OECD 301A) The product is easily biodegradable.
Fatty alcohol, ethoxylated	> 60 % (28 d, OECD 301B) Readily biodegradable
alkylammonium carbonate	96 % (28 d, OECD 301B) Readily biodegradable

12.3 Bioaccumulative Potential Product:

Not applicable for mixtures



Specified substance(s) Fatty alcohol, ethoxylated	Bioconcentration Factor (BCF): 13 - 68 Potential to bioaccumulate is low.
12.4 Mobility in Soil: Product:	Not applicable for mixtures
12.5 Results of PBT and vPvB assessment:	The product does not contain any substances fulfilling the PBT/vPvB criteria.
12.6 Other Adverse Effects:	No data available.
Water Hazard Class (WGK):	WGK 1: slightly water-endangering.
SECTION 13: Disposal consideration	ions
13.1 Waste treatment methods	
General information:	
	Dispose in accordance with all applicable regulations.
Disposal methods:	Dispose in accordance with all applicable regulations. Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.
Disposal methods: <u>European Waste Codes</u>	Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and

SECTION 14: Transport information

ADR/RID 14.1 UN Number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	UN 1760 CORROSIVE LIQUID, N.O.S.(ETHANOL AMINE) 8 8 80 (E)
14.4 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user:	 _ _
ADN 14.1 UN Number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es) Class: Label(s): 14.3 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user:	CORROSIVE LIQUID, N.O.S.(ETHANOL AMINE) 8 8 III –



IMDG 14.1 UN Number:	
14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es)	CORROSIVE LIQUID, N.O.S.(ETHANOL AMINE)
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
14.3 Packing Group:	III
14.5 Environmental hazards:	-
14.6 Special precautions for user:	-
ΙΑΤΑ	
14.1 UN Number:	
14.2 Proper Shipping Name:	Corrosive liquid, n.o.s.(ETHANOL AMINE)
14.3 Transport Hazard Class(es):	
Class:	8
Label(s):	8
14.4 Packing Group:	111
14.5 Environmental hazards:	-
14.6 Special precautions for user:	-

14.7 Transport in bulk according to Annex II of MARPOL73/78 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 Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

15.2 Chemical safety No Chemical Safety Assessment has been carried out. **assessment:**

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.



Wording of the H-statements in section 2 and 3

wording of the H-state	ements in Section 2 and 3
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Other information:	The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).
Revision Date: Disclaimer:	06.07.2016 The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no

signature.