According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

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

1.1 Product identifier

Trade name : NEODOL 1
Product code : V2705

Registration number EU : 01-2119485847-18-0001

Synonyms : C11 alcohol CAS-No. : 112-42-5

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

Use of the Sub: : Use in detergent manufacture.

stance/Mixture Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Uses advised against : This product must not be used in applications other than the

above without first seeking the advice of the supplier.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : Shell Chemicals Europe B.V.

PO Box 2334

3000 CH Rotterdam

Netherlands

Telephone : +31 (0)10 441 5137 / +31 (0)10 441 5191 Telefax : +31 (0)20 716 8316 / +31 (0)20 713 9230

Contact for Safety Data : sccmsds@shell.com

Sheet

1.4 Emergency telephone number

+44 (0) 1235 239 670 (This telephone number is available 24 hours per day, 7 days per

week)

Poisons Centre: 070 245 245

Other information : NEODOL is a trademark owned by Shell Trademark Man-

agement B.V. and Shell Brands Inc. and used by affiliates of

Royal Dutch Shell plc.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

Short-term (acute) aquatic hazard, Cate-

H400: Very toxic to aquatic life.

gory 1

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Long-term (chronic) aquatic hazard, Cat-

egory 2

H411: Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements EUH066: Repeated exposure may cause skin dry-

ness or cracking.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word : Warning

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard according to CLP

criteria.

HEALTH HAZARDS:

H319 Causes serious eye irritation.

ENVIRONMENTAL HAZARDS:

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard

Statements

EUH066

Repeated exposure may cause skin dryness or

cracking.

Precautionary statements : Prevention:

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

P273 Avoid release to the environment.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Storage:

No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

2.3 Other hazards

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

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

Repeated exposure may cause skin dryness or cracking. Harmful: May cause lung damage if swallowed.

SECTION 3: Composition/information on ingredients

3.1 Substances

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
Undecan-1-ol	112-42-5	<= 100
	203-970-5	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Not expected to be a health hazard when used under normal

conditions.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

If inhaled : No treatment necessary under normal conditions of use. If

symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Immediately flush skin with

large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical

facility for additional treatment.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Transport to the nearest medical facility for additional treat-

ment.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

If swallowed : In general no treatment is necessary unless large quantities

are swallowed, however, get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Not considered to be an inhalation hazard under normal con-

ditions of use.

Possible respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, cough-

ing, and/or difficulty breathing.

Skin irritation signs and symptoms may include a burning sen-

sation, redness, or swelling.

Eye irritation signs and symptoms may include a burning sen-

sation, redness, swelling, and/or blurred vision.

No specific hazards under normal use conditions.

Ingestion may result in nausea, vomiting and/or diarrhoea.

Defatting dermatitis signs and symptoms may include a burn-

ing sensation and/or a dried/cracked appearance.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

Call a doctor or poison control center for guidance.

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam, water spray or fog. Dry chemical pow-

der, carbon dioxide, sand or earth may be used for small fires

only.

Unsuitable extinguishing

media

Do not use water in a jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Carbon monoxide may be evolved if incomplete combustion

occurs

Will float and can be reignited on surface water.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Further information : Clear fire area of all non-emergency personnel.

Keep adjacent containers cool by spraying with water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Observe all relevant local and international regulations.

Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

Local authorities should be advised if significant spillages

cannot be contained.

6.1.1 For non emergency personnel:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see

Section 13 of this Safety Data Sheet. Stay upwind and keep out of low areas. Be ready for fire or possible exposure. 6.1.2 For emergency responders:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see

Section 13 of this Safety Data Sheet. Stay upwind and keep out of low areas. Be ready for fire or possible exposure.

6.2 Environmental precautions

Environmental precautions : Prevent from spreading or entering into drains, ditches or riv-

ers by using sand, earth, or other appropriate barriers.

Use appropriate containment to avoid environmental contami-

nation.

Ventilate contaminated area thoroughly.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : For large liquid spills (> 1 drum), transfer by mechanical

means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely For small liquid spills (< 1 drum), transfer by mechanical

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

6.4 Reference to other sections

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Avoid breathing of or direct contact with material. Only use in

well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this

material

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

Advice on safe handling : Avoid contact with skin, eyes and clothing.

Do not empty into drains.

Sudden Release of Pressure Hazard

Product Transfer : Keep containers closed when not in use. Do not use com-

pressed air for filling discharge or handling.

Hygiene measures : Wash hands before eating, drinking, smoking and using the

toilet. Launder contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Refer to section 15 for any additional specific legislation cov-

ering the packaging and storage of this product.

Further information on stor-

age stability

Bulk storage tanks should be diked (bunded).

Vapours from tanks should not be released to atmosphere. Breathing losses during storage should be controlled by a

suitable vapour treatment system.

Nitrogen blanket recommended for large tanks (capacity 100

m3 or higher).

Insulation (lagging) will minimize heat loss in areas of low

ambient temperature.

Tanks should be fitted with heating coils in areas where ambient conditions can result in handling temperatures below the

freezing point/pour point of the product.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Packaging material : Suitable material: Stainless steel., Epoxy resins, Polyester.

Unsuitable material: Aluminum, Copper., Copper alloys.

Container Advice : Containers, even those that have been emptied, can contain

explosive vapours. Do not cut, drill, grind, weld or perform

similar operations on or near containers.

7.3 Specific end use(s)

Specific use(s) : Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Biological occupational exposure limits

No biological limit allocated.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
NEODOL 1E, 112-42-5	Fresh water	0,0088 mg/l
NEODOL 1E, 112-42-5	Fresh water sediment	1,612 mg/kg
NEODOL 1E, 112-42-5	Soil	1,606 mg/kg
NEODOL 1E, 112-42-5	Sewage treatment plant	> 0,086 mg/l

8.2 Exposure controls

Engineering measures

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Eye washes and showers for emergency use.

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Do not ingest. If swallowed, then seek immediate medical assistance.

Personal protective equipment

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye protection : Wear goggles for use against liquids and gas.

Wear full face shield if splashes are likely to occur.

Approved to EU Standard EN166.

Hand protection

Remarks : Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Skin and body protection

Skin protection is not required under normal conditions of

use.

For prolonged or repeated exposures use impervious clothing

over parts of the body subject to exposure.

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Date of last issue: 24.08.2023 Version Revision Date: SDS Number:

17.11.2023 800001001059 Print Date 26.11.2023 3.1

Protective clothing approved to EU Standard EN14605.

Respiratory protection If engineering controls do not maintain airborne concentra-

tions to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Where air-filtering respirators are suitable, select an appro-

priate combination of mask and filter.

If air-filtering respirators are suitable for conditions of use: Select a filter suitable for the combination of organic gases and vapours and particles meeting EN14387 and EN143 [Filter type A/P for use against certain organic gases and vapours with a boiling point >65°C (149°F) and for use

against particles].

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Liquid at 20 °C.

Colour colourless

Odour mild

Odour Threshold Data not available

Melting / freezing point Data not available

11 °C pour point

Boiling point/boiling range 245 °C

Flammability

Flammability (solid, gas) Not applicable

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / upper flammability limit

Data not available

Lower explosion limit / Lower flammability limit Data not available

Flash point : 121 °C

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Auto-ignition temperature : Data not available

Decomposition temperature

Decomposition tempera-

ture

: Data not available

pH : Data not available

Viscosity

Viscosity, dynamic : Typical 17 mPa.s (20 °C)

Method: ASTM D445

50 mPa.s (Not applicable) Method: ASTM D445

Viscosity, kinematic : 11,0 mm2/s (40 °C)

Method: ASTM D445

18 mm2/s (25 °C) Method: ASTM D445

Solubility(ies)

Water solubility : 19,1 mg/l (25 °C)

Partition coefficient: n-

octanol/water

log Pow: 4,72

Vapour pressure : 0,4 Pa

Relative density : 0,831 (25 °C)

Method: ASTM D4052

Density : 830 kg/m3 (20 °C)

Method: ASTM D4052

Relative vapour density : 4,5

Particle characteristics

Particle size : Data not available

9.2 Other information

Explosives : Not classified

Oxidizing properties : Data not available

Evaporation rate : Data not available

Conductivity: > 10,000 pS/m

A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

the conductivity of a liquid, This material is not expected to be

a static accumulator.

Surface tension : Data not available

Molecular weight : 172 - 173 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable at normal ambient temperature and pressure.

May oxidise in the presence of air.

10.2 Chemical stability

The product is chemically stable. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Materials to avoid : Copper.

Copper alloys.

Strong oxidising agents.

Aluminum

10.6 Hazardous decomposition products

None expected under normal use conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of : Exposure may occur via inhalation, ingestion, skin absorption,

exposure skin or eye contact, and accidental ingestion.

Acute toxicity

Components:

Undecan-1-ol:

Acute oral toxicity : LD50 (Rat): > 5000 mg/kg

Remarks: Low toxicity

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Acute inhalation toxicity : Remarks: Low toxicity

Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD50 (Rabbit): > 5000 mg/kg

Remarks: Low toxicity

Skin corrosion/irritation

Components:

Undecan-1-ol:

Remarks : Causes mild skin irritation.

Serious eye damage/eye irritation

Components:

Undecan-1-ol:

Remarks : Causes serious eye irritation.

Respiratory or skin sensitisation

Components:

Undecan-1-ol:

Remarks : Not a sensitiser.

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Components:

Undecan-1-ol:

Genotoxicity in vivo : Remarks: No evidence of mutagenic activity.

Germ cell mutagenicity- As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

Carcinogenicity

Components:

Undecan-1-ol:

Remarks : Not a carcinogen.

Based on available data, the classification criteria are not met.

Carcinogenicity - Assess-

ment

: This product does not meet the criteria for classification in

categories 1A/1B.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Material	GHS/CLP Carcinogenicity Classification
Undecan-1-ol	No carcinogenicity classification.

Reproductive toxicity

Components:

Undecan-1-ol:

Effects on fertility

Remarks: Not a developmental toxicant., Based on available data, the classification criteria are not met., Does not impair

fertility.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

STOT - single exposure

Components:

Undecan-1-ol:

Remarks : Based on available data, the classification criteria are not met.

STOT - repeated exposure

Components:

Undecan-1-ol:

Remarks : Based on available data, the classification criteria are not met.

Aspiration toxicity

Components:

Undecan-1-ol:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Further information

Product:

Remarks : Unless indicated otherwise, the data presented is representa-

tive of the product as a whole, rather than for individual com-

ponent(s).

Components:

Undecan-1-ol:

Remarks : Classifications by other authorities under varying regulatory

frameworks may exist.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Undecan-1-ol:

Toxicity to fish : Remarks: LC/EC/IC50 >1 - <=10 mg/l

Toxic

Toxicity to daphnia and other : Remarks: Very toxic.

aquatic invertebrates

Remarks: Very toxic. LC/EC/IC50 < 1 mg/l

Toxicity to algae/aquatic plants : Remarks: LC/EC/IC50 >1 - <=10 mg/l

Toxic

M-Factor (Acute aquatic tox-

icity)

: 1

Toxicity to microorganisms

Remarks: LC/EC/IC50 > 100 mg/l

Practically non toxic:

Based on available data, the classification criteria are not met.

Toxicity to fish (Chronic tox-

citv)

Remarks: Data not available

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: NOEC/NOEL > 0.01 - <=0.1 mg/l

12.2 Persistence and degradability

Components:

Undecan-1-ol:

Biodegradability : Remarks: Readily biodegradable.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Oxidises rapidly by photo-chemical reactions in air.

12.3 Bioaccumulative potential

Components:

Undecan-1-ol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely to occur due to metabolism

and excretion.

12.4 Mobility in soil

Components:

Undecan-1-ol:

Mobility : Remarks: Floats on water., If product enters soil, it will be

highly mobile and may contaminate groundwater.

12.5 Results of PBT and vPvB assessment

Components:

Undecan-1-ol:

Assessment : The substance does not fulfill all screening criteria for persis-

tence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB..

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to

have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal meth-

ods in compliance with applicable regulations.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023 3.1 17.11.2023 800001001059 Print Date 26.11.2023

Do not dispose into the environment, in drains or in water

courses.

Waste product should not be allowed to contaminate soil or

water.

Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

Contaminated packaging : Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire.

Residues may cause an explosion hazard. Do not puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

SECTION 14: Transport information

14.1 UN number or ID number

ADN : 3082
ADR : 3082
RID : 3082
IMDG : 3082
IATA : 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Undecan-1-ol)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Undecan-1-ol)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Undecan-1-ol)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Undecan-1-ol)

IATA : Environmentally hazardous substances, liquid, n.o.s.

(Undecan-1-ol)

14.3 Transport hazard class(es)

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023 3.1 17.11.2023 800001001059 Print Date 26.11.2023

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M6
Labels : 9 (N1, F)

CDNI Inland Water Waste : NST 8192 Fatty alcohols

Agreement

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III Labels : 9

IATA

Packing group : III Labels : 9

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

14.6 Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

14.7 Maritime transport in bulk according to IMO instruments

Pollution category : X

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Ship type : 2

Product name : Undecyl alcohol

Additional Information: This product may be transported under nitrogen blanketing.

Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space

entry.

Transport in bulk according to Annex II of Marpol and the IBC

Code

SECTION 15: Regulatory information

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

Other regulations:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

The components of this product are reported in the following inventories:

DSL : Listed

IECSC : Listed

ENCS : Listed

KECI : Listed

NZIoC : Listed

PICCS : Listed

TSCA : Listed

TCSI : Listed

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Training advice : Provide adequate information, instruction and training for op-

erators.

Other information : For Industry guidance and tools on REACH please visit the

CEFIC website at http://cefic.org/Industry-support.

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB.

A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to : The quoted data are from, but not limited to, one or more

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

compile the Safety Data sources of information (e.g. toxicological data from Shell

Sheet Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

Identified Uses according to the Use Descriptor System

Uses - Worker

Title : Manufacture of substance- Industrial

Uses - Worker

Title : Use as an intermediate- Industrial

Uses - Worker

Title : Formulation & (re)packing of substances and mixtures- Indus-

trial

Uses - Worker

Title : Uses in Coatings- Industrial

Uses - Worker

Title : Uses in Coatings- Professional

Uses - Worker

Title : Use in Cleaning Agents- Industrial

Uses - Worker

Title : Use in Cleaning Agents- Professional

Uses - Worker

Title : Metal working fluids / rolling oils- Industrial

Uses - Worker

Title : Metal working fluids / rolling oils- Professional

Identified Uses according to the Use Descriptor System

Uses - Consumer

Title : Uses in Coatings

- Consumer

Uses - Consumer

Title : Use in Cleaning Agents

- Consumer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

BE / EN

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000571 Manufacture of Linevol 11 / Neodol 1 - Industrial	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Manufacture of substance- Industrial
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC1
Scope of process	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated
stance in Mixture/Article	differently).,
Frequency and Duration of	Use
Covers daily exposures up to 8 hours (unless stated differently).	
Other Operational Conditions affecting Exposure	
Assumes a good basic standard of occupational hygiene is implemented.	

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structure.		
Alcohol.		

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Doodily, biodowyodakla	<u> </u>
Readily biodegradable.	
Amounts Used	<u> </u>
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	300
Maximum daily site tonnage (kg/day):	563
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	
Release fraction to wastewater from process (initial release prior to	
RMM):	
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pr	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit disch	arges, air emis-
sions and releases to soil	•
Risk from environmental exposure is driven by soil.	
Prevent discharge of undissolved substance to or recover from onsite	
wastewater.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	•
Do not apply industrial sludge to natural soils.	
Sludge should be incinerated, contained or reclaimed.	
,	
Conditions and Measures related to municipal sewage treatment p	olant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	10.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
	r disposal
Conditions and Measures related to external treatment of waste fo	
During manufacturing no waste of the substance is generated.	•
During manufacturing no waste of the substance is generated.	
	•

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

ethoxylate :

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000572 Use of Linevol 11 / Neodol 1 as an Intermediate-Industrial	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use as an intermediate- Industrial
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC6a
Scope of process	Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/ recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Substance in Mixture/Article	Covers use of substance/product up to 100% (unless stated differently).,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes a good basic standard of occupational hygiene is implemented.		

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structure.		
Alcohol.		

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

	T
Readily biodegradable.	
Amounts Used	
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	163
Maximum daily site tonnage (kg/day):	543
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	0,05
Release fraction to wastewater from process (initial release prior to	0,007
RMM):	,
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pre	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discha-	arges, air emis-
sions and releases to soil	,
Risk from environmental exposure is driven by marine water.	
Prevent discharge of undissolved substance to or recover from onsite	
wastewater.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Do not apply industrial sludge to natural soils.	
Sludge should be incinerated, contained or reclaimed.	
Conditions and Measures related to municipal sewage treatment pl	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	10.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	
External treatment and disposal of waste should comply with applicable	local and/or regional
regulations.	
This substance is consumed during use and no waste of substance is g	enerated.
Conditions and measures related to external recovery of waste	

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

This substance is consumed during use and no waste of substance is generated.

ethoxylate

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000574 Formulation/Repacking of Linevol 11 / Neodol 1 - Industrial	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Formulation & (re)packing of substances and mixtures- Industrial
Use Descriptor	Sector of Use: SU3, SU10 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 8a, PROC 8b, PROC 9, PROC 14, PROC 15 Environmental Release Categories: ERC2
Scope of process	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes a good basic standard of occupational hygiene is implemented.		

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands.
	No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structure.		

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Alcohol.	
Readily biodegradable.	
Amounts Used	
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	41
Maximum daily site tonnage (kg/day):	137
Frequency and Duration of Use	101
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	300
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
	100
Other Operational Conditions affecting Environmental Exposure	4 755 00
Release fraction to air from process (initial release prior to RMM):	1,75E-03
Release fraction to wastewater from process (initial release prior to RMM):	2,0E-05
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pre	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discha-	arges, air emis-
sions and releases to soil	
Risk from environmental exposure is driven by marine water.	
Prevent discharge of undissolved substance to or recover from onsite	
wastewater.	
If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Sludge should be incinerated, contained or reclaimed.	
Conditions and Measures related to municipal sewage treatment pl	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	10.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	disposal
External treatment and disposal of waste should comply with applicable regulations.	
Conditions and measures related to external recovery of waste	
	local and/or regional
External recovery and recycling of waste should comply with applicable	iocai and/or regional

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

regulations.

ethoxylate

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

Exposure oceriano - Worker	
30000000575 Use of Linevol 11 / Neodol 1 Coatings - Industrial	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13, PROC 15 Environmental Release Categories: ERC4
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes a good basic standard of occupational hygiene is implemented.		

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2	Control of Environmental Exposure

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

	T
Substance is a unique structure.	
Alcohol.	
Readily biodegradable.	
Amounts Used	
Fraction of EU tonnage used in region:	7,500
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	5,20E-03
Maximum daily site tonnage (kg/day):	0,017
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	•
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	0,03
Release fraction to wastewater from process (initial release prior to	0.03
RMM):	,,,,,
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pro	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discha	arges, air emis-
sions and releases to soil	g ,
Risk from environmental exposure is driven by marine water.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Sludge should be incinerated, contained or reclaimed.	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	disposal
External treatment and disposal of waste should comply with applicable	
regulations.	5
Conditions and measures related to external recovery of waste	
External recovery and recycling of waste should comply with applicable	local and/or regional

Revision Date:

According to EC No 1907/2006 as amended as at the date of this SDS

SDS Number:

NEODOL 1

Version

3.1 17.11.2023 800001001059 Print Date 26.11.2023

ethoxylate :

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects.
Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Date of last issue: 24.08.2023

ethoxylate :

Section 3.2 - Environment Used EUSES model.

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

20000000576 Lloc of L	inaval 11 / Naadal 1 Coatings - Professional
30000000576 Use of Linevol 11 / Neodol 1 Coatings - Professional	
	I
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Professional
Use Descriptor	Sector of Use: SU22
	Process Categories: PROC 1, PROC 2, PROC 3, PROC 4,
	PROC 5, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC
	13, PROC 15, PROC 19
	Environmental Release Categories: ERC8a, ERC8d
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes a good basic standard of occupational hygiene is implemented.		

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2	Control of Environmental Exposure

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

	T
Substance is a unique structure.	
Alcohol.	
Readily biodegradable.	
Amounts Used	
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	0,16
Maximum daily site tonnage (kg/day):	0,53
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	0,01
Release fraction to wastewater from process (initial release prior to	0,01
RMM):	0,01
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pro-	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discha	arges air emis-
sions and releases to soil	goo, a oo
Risk from environmental exposure is driven by marine water.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Sludge should be incinerated, contained or reclaimed.	
· · · · · · · · · · · · · · · · ·	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	disposal
External treatment and disposal of waste should comply with applicable	
regulations.	
Conditions and measures related to external recovery of waste	
External recovery and recycling of waste should comply with applicable	local and/or regional
	<u> </u>

Revision Date:

According to EC No 1907/2006 as amended as at the date of this SDS

SDS Number:

NEODOL 1

Version

3.1 17.11.2023 800001001059 Print Date 26.11.2023

ethoxylate :

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment
Used EUSES model.

Date of last issue: 24.08.2023

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

ethoxylate

Risk Management Measures are based on qualitative risk characterisation.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000577 Use of Linevol 11 / Neodol 1 Cleaning Agents - Industrial	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13 Environmental Release Categories: ERC4
Scope of process	Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure			
Product Characteristics				
Physical form of product	Liquid			
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated			
stance in Mixture/Article	differently).,			
Frequency and Duration of	f Use			
Covers daily exposures up to 8 hours (unless stated differently).				
Other Operational Conditions affecting Exposure				
Assumes a good basic standard of occupational hygiene is implemented.				

ethoxylate

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination
imanoj.	on hands.
	No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structure.		

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

	1
Alcohol.	
Readily biodegradable.	
Amounts Used	T-
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	0,24
Maximum daily site tonnage (kg/day):	1,1
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	220
Environmental factors not influenced by risk management	•
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	1
Release fraction to air from process (initial release prior to RMM):	0
Release fraction to wastewater from process (initial release prior to	1
RMM):	
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pro	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discharge	arges, air emis-
sions and releases to soil	argoo, air oimo
Risk from environmental exposure is driven by marine water.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Sludge should be incinerated, contained or reclaimed.	
craage official so montorated, contained of rectaining	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	r disposal
External treatment and disposal of waste should comply with applicable	local and/or regiona
regulations.	a. a.ia, oi rogiona
<u>-</u>	
Conditions and measures related to external recovery of waste	
External recovery and recycling of waste should comply with applicable	local and/or regional
regulations.	
- 	

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

ethoxylate :

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

300000000579 Use of L	inevol 11 / Neodol 1 Cleaning Agents - Professional
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 13 Environmental Release Categories: ERC8a, ERC8d
Scope of process	Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of	Use	
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Condition	ons affecting Exposure	
Assumes a good basic stand	lard of occupational hygiene is implemented.	

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structu	re.	
Alcohol.		

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

Readily biodegradable.	
Amounts Used	
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	0,13
Maximum daily site tonnage (kg/day):	0,13
Frequency and Duration of Use	0,30
Continuous release.	
	205
Emission Days (days/year):	365
Environmental factors not influenced by risk management Local freshwater dilution factor:	10
	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	0
Release fraction to wastewater from process (initial release prior to	1
RMM):	
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pro	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discharge and releases to sail	arges, air emis-
sions and releases to soil	1
Risk from environmental exposure is driven by freshwater.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	0
Treat air emission to provide a typical removal efficiency of (%) Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	99
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	U
Organisational measures to prevent/limit release from site	
Sludge should be incinerated, contained or reclaimed.	
Studge Should be inclinerated, contained or rectainted.	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	33
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	33
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	2.000
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	r disnosal
External treatment and disposal of waste should comply with applicable regulations.	
Conditions and management related to external reservence of	
Conditions and measures related to external recovery of waste	land and/ourselves
External recovery and recycling of waste should comply with applicable regulations.	iocai and/or regional

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

ethoxylate :

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000581 Use of L Industrial	inevol 11 / Neodol 1 in MetalWork Fluid/Roll Oil -
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Metal working fluids / rolling oils- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 5, PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 13, PROC 17 Environmental Release Categories: ERC4
Scope of process	Covers the use in formulated MWFs including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protections, draining and working on contaminated/ reject articles, and disposal of waste oils.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration o	f Use	
Covers daily exposures up to	o 8 hours (unless stated differently).	
Other Operational Condition	ons affecting Exposure	
Assumes a good basic stand	dard of occupational hygiene is implemented.	

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

Section 2.2 Control of Environmental Exposure

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

Outstance in a unique atmenture	T
Substance is a unique structure.	
Alcohol.	
Readily biodegradable.	
Amounts Used	1
Fraction of EU tonnage used in region:	
Regional use tonnage (tonnes/year):	
Fraction of Regional tonnage used locally:	
Annual site tonnage (tonnes/year):	7,1
Maximum daily site tonnage (kg/day):	23,7
Frequency and Duration of Use	
Continuous release.	
Emission Days (days/year):	300
Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	6,00E-05
Release fraction to wastewater from process (initial release prior to	2,10E-07
RMM):	,
Release fraction to soil from process (initial release prior to RMM):	
Technical conditions and measures at process level (source) to pro-	event release
Common practices vary across sites thus conservative process re-	
lease estimates used.	
Technical onsite conditions and measures to reduce or limit discha-	arges, air emis-
sions and releases to soil	J ,
Risk from environmental exposure is driven by marine water.	
If discharging to domestic sewage treatment plant, no secondary	
wastewater treatment required.	
Treat air emission to provide a typical removal efficiency of (%)	0
Treat onsite wastewater (prior to receiving water discharge) to provide	99
the required removal efficiency of >= (%)	
If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	•
Sludge should be incinerated, contained or reclaimed.	
,	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	99
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	99
(domestic treatment plant) RMMs (%)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	
Conditions and Measures related to external treatment of waste for	r disposal
External treatment and disposal of waste should comply with applicable	
regulations.	
- U - ··· - · · ·	
Conditions and measures related to external recovery of waste	
External recovery and recycling of waste should comply with applicable	local and/or regional
regulations.	

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

SDS Number: Date of last issue: 24.08.2023 Version Revision Date: 17.11.2023 800001001059 Print Date 26.11.2023 3.1 ethoxylate **EXPOSURE ESTIMATION SECTION 3** ethoxylate Section 3.1 - Health Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation. ethoxylate **Section 3.2 - Environment** Used EUSES model. ethoxylate **SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO** ethoxylate Section 4.1 - Health Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Section 4.2 - Environment

ethoxylate

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Worker

30000000584 Use of Linevol 11 / Neodol 1 in MetalWork Fluid/Roll Oil - Professional		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Metal working fluids / rolling oils- Professional	
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 5, PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 11, PROC 13, PROC 17 Environmental Release Categories: ERC8a, ERC8d	
Scope of process	Covers the use in formulated MWFs/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils.	

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid
Concentration of the Substance in Mixture/Article	Covers use of substance/product up to 100% (unless stated differently).,
Frequency and Duration o	f Use
Covers daily exposures up t	o 8 hours (unless stated differently).
Other Operational Condition	ons affecting Exposure
Assumes a good basic stand	dard of occupational hygiene is implemented.

ethoxylate :

Contributing Scenarios	Risk Management Measures
General measures (eye	Use suitable eye protection.
irritants).	Avoid direct eye contact with product, also via contamination on hands. No other specific measures identified.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

Section 2.2	Control of Environmental Exposure	
Substance is a unique stru	ucture.	
Alcohol.		
Readily biodegradable.		
Amounts Used		•
Fraction of EU tonnage us	ed in region:	
Regional use tonnage (tor		
Fraction of Regional tonna		
Annual site tonnage (tonn		7,1
Maximum daily site tonnage		23,7
Frequency and Duration		<u> </u>
Continuous release.		
Emission Days (days/year):	365
	ot influenced by risk management	
Local freshwater dilution fa		10
Local marine water dilution	n factor:	100
	tions affecting Environmental Exposure	
	n process (initial release prior to RMM):	6,00E-05
	vater from process (initial release prior to	2,10E-07
RMM):	F	
	m process (initial release prior to RMM):	
	d measures at process level (source) to pr	event release
	cross sites thus conservative process re-	
lease estimates used.	•	
Technical onsite condition	ons and measures to reduce or limit disch	arges, air emis-
sions and releases to so		•
Risk from environmental e	exposure is driven by marine water.	
If discharging to domestic	sewage treatment plant, no secondary	
wastewater treatment requ	uired.	
Treat air emission to provi	de a typical removal efficiency of (%)	0
Treat onsite wastewater (p	prior to receiving water discharge) to provide	99
the required removal effici	ency of >= (%)	
If discharging to domestic	sewage treatment plant, no secondary	0
wastewater treatment requ	uired.	
	s to prevent/limit release from site	
Sludge should be incinera	ted, contained or reclaimed.	
Conditions and Measure	s related to municipal sewage treatment p	lant
	oval from wastewater via domestic sewage	99
treatment (%)		-
	from wastewater after onsite and offsite	99
(domestic treatment plant)		
	e treatment plant flow (m3/d)	2.000
	onnage (MSafe) based on release following	
total wastewater treatmen		
	s related to external treatment of waste fo	r disposal
	sposal of waste should comply with applicable	
regulations.		ŭ
Conditions and measure	es related to external recovery of waste	
External recovery and reci	ycling of waste should comply with applicable	local and/or regional

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

regulations.

ethoxylate

SECTION 3 EXPOSURE ESTIMATION

ethoxylate :

Section 3.1 - Health

Available hazard data do not enable the derivation of a DNEL for eye irritant effects. Risk Management Measures are based on qualitative risk characterisation.

ethoxylate :

Section 3.2 - Environment

Used EUSES model.

ethoxylate :

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Consumer

30000001072 Use of Linevol 11/Neodol 1 in Coatings - Consumer	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC1, PC4, PC8 (excipient only), PC9a, PC9b, PC9c, PC15, PC18, PC23, PC24, PC31, PC34 Environmental Release Categories: ERC8a, ERC8d
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Consumer Exposure
Product Characteristics	
ethoxylate	:

Product Categories

OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES

General measures applicable to all Product Categories.

General measures (eye

Avoid direct eye contact with product, also via contamination

on hands.

ethoxylate :

irritants).

Section 2.2	Control of Environmental Exposure	
Substance is a unique structu	re.	
Alcohol.		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used	in region:	
Regional use tonnage (tonnes/year):		
Fraction of Regional tonnage used locally:		
Annual site tonnage (tonnes/y	/ear):	0,16
Maximum daily site tonnage (kg/day): 0,53		0,53
Frequency and Duration of	Use	
Continuous release.		
Emission Days (days/year):	<u> </u>	300

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

	ot influenced by risk management	10
Local freshwater dilution fa		10
Local marine water dilution		100
	tions affecting Environmental Exposure	T = 2.
	n process (initial release prior to RMM):	0,01
RMM):	water from process (initial release prior to	0,01
	m process (initial release prior to RMM):	
Conditions and Measure	s related to municipal sewage treatment p	olant
	exposure is driven by marine water.	
treatment (%)	oval from wastewater via domestic sewage	99
Assumed domestic sewage treatment plant flow (m3/d) 2.000		2.000
	onnage (MSafe) based on release following	
total wastewater treatmen	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	es related to external treatment of waste for	
al regulations.	sposal of waste should comply with applicable	e local allu/ol region-
Conditions and measure	es related to external recovery of waste	
External recovery and rec regulations.	ycling of waste should comply with applicable	e local and/or regiona
ethoxylate	:	
SECTION 3	EXPOSURE ESTIMATION	
ethoxylate	:	

Risk Management Measures are based on qualitative risk characterisation.

ethoxylate

Section 3.2 - Environment

Used EUSES model.

ethoxylate

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE
	EXPOSURE SCENARIO

ethoxylate :

Section 4.1 - Health

Risk Management Measures are based on qualitative risk characterisation.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Exposure Scenario - Consumer

30000001074 Use	of Linevol 11/Neodol 1 in Cleaning Agents - Consumer
CECTION 4	EVENOCUEE COEMARIO TITLE
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC3, PC4, PC8 (excipient only), PC9a, PC24, PC35, PC38 Environmental Release Categories: ERC8a, ERC8d
Scope of process	Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.

ethoxylate :

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT
	MEASURES

ethoxylate :

Section 2.1	Control of Consumer Exposure
Product Characteristics	
ethoxylate	:

Product Categories OPERATIONAL CONDITIONS A

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
General measures applicable to all Product Categories.	No risk management measures required if the substance in the mixture is below the classification threshold.
General measures (eye irritants).	Avoid direct eye contact with product, also via contamination on hands.

Section 2.2	Control of Environmental Exposure	
Substance is a unique structure.		
Alcohol.		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used in region:		
Regional use tonnage (tonnes/year):		
Fraction of Regional tonnage used locally:		
Annual site tonnage (tonnes/year):		0,069
Maximum daily site tonnage (kg/day):	0,19
Frequency and Duration of	Use	
Continuous release.		
Emission Days (days/year):		365

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

Version Revision Date: SDS Number: Date of last issue: 24.08.2023

3.1 17.11.2023 800001001059 Print Date 26.11.2023

Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Expe	
Release fraction to air from process (initial release prior to RMM	
Release fraction to wastewater from process (initial release prior	
RMM):	1
Release fraction to soil from process (initial release prior to RM	M).
Conditions and Measures related to municipal sewage trea	
Risk from environmental exposure is driven by freshwater.	ment plant
Estimated substance removal from wastewater via domestic se	wage 99
treatment (%)	wage 99
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Maximum allowable site tonnage (MSafe) based on release following	
total wastewater treatment removal (kg/d)	Swing
Conditions and Measures related to external treatment of w	vacto for disposal
External treatment and disposal of waste should comply with an	
	phicable local and/or region-
al regulations.	
Conditions and massives related to systemal resource of w	
Conditions and measures related to external recovery of w	
External recovery and recycling of waste should comply with ap	plicable local and/or regional
regulations.	
all a late	
ethoxylate :	
SECTION 3 EXPOSURE ESTIMATION	
SECTION 3 EXPOSURE ESTIMATION	
-41	
ethoxylate :	
Costion 2.4 Hoolth	
Section 3.1 - Health	
Available hazard data do not enable the derivation of a DNEL for	
Risk Management Measures are based on qualitative risk chara	acterisation.
ather than	
ethoxylate :	
Continuo 2 2 Empirormant	
Section 3.2 - Environment	
Used EUSES model.	

ethoxylate :

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE
	EXPOSURE SCENARIO

Section 4.1 - Health	
Risk Management Measures are based on qualitative risk characterisation.	

According to EC No 1907/2006 as amended as at the date of this SDS

NEODOL 1

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 24.08.2023

 3.1
 17.11.2023
 800001001059
 Print Date 26.11.2023

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

ethoxylate :

Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.