CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

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

1.1 Product identifier

Trade name : CARADOL MD46-18

Product code : U312X Synonyms : Polyol CAS-No. : 9082-00-2

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

Use of the : Use for the manufacture of polyurethane products.

Substance/Mixture

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

Email Contact for Safety Data : sccmsds@shell.com

Sheet

1.4 Emergency telephone number

+45 33 37 20 00 (24h)

Forgifte informationscentret: +45 82 12 12 12

Other information : CARADOL is a trademark owned by Shell Trademark

Management B.V. and Shell Brands Inc. and used by affiliates

of Royal Dutch Shell plc.

: This product is a Polymer which is exempt from the obligation to register under REACH in accordance with Article II, Section

9.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Based on available data this substance / mixture does not meet the classification criteria.

2.2 Label elements

1 / 18 800010031341 DK

Regulation 1907/2006/EC

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms No Hazard Symbol required

Signal word No signal word

Hazard statements PHYSICAL HAZARDS:

Not classified as a physical hazard

according to CLP criteria. **HEALTH HAZARDS:**

Not classified as a health hazard under CLP

ENVIRONMENTAL HAZARDS:

Not classified as environmental hazard

according to CLP criteria.

Prevention: Precautionary statements

No precautionary phrases.

Response:

No precautionary phrases.

Storage:

No precautionary phrases.

Disposal:

No precautionary phrases.

2.3 Other hazards

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

Chemical name	CAS-No. EC-No.	Concentration [%]
Polyalkylene glycol	9082-00-2	<= 100

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.

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

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

If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with

> water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.

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

rinsina.

If persistent irritation occurs, obtain medical attention.

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 : Does not pose an acute hazard under normal conditions of

use.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically. Following cases of gross over-

> exposure, investigation of liver, kidney and eye function may be advisable. Records of such incidents should be maintained

for future reference.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Large fires should only be fought by properly trained fire

> fighters., Alcohol-resistant foam, water spray or fog. Dry chemical powder, 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

firefighting

: Will only burn if enveloped in a pre-existing fire. Hazardous combustion products may include: Carbon dioxide

Unidentified organic and inorganic compounds. Toxic gases

Carbon monoxide.

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

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

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

: Standard procedure for chemical fires.

: Clear fire area of all non-emergency personnel.

Specific extinguishing

methods

Further information

All storage areas should be provided with adequate fire

fighting facilities.

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.

> 6.1.1 For non emergency personnel: Avoid contact with skin, eyes and clothing.

Avoid inhaling vapour and/or mists.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

6.1.2 For emergency responders:

Avoid contact with skin, eves and clothing. Avoid inhaling vapour and/or mists.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

6.2 Environmental precautions

Environmental precautions : Remove all possible sources of ignition in the surrounding

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Use appropriate containment to avoid environmental

contamination.

Ventilate contaminated area thoroughly.

6.3 Methods and materials 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 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.

Proper disposal should be evaluated based on regulatory status of this material (refer to Chapter 13), potential

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

> contamination from subsequent use and spillage, and regulations governing disposal in the local area.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

General Precautions : 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

Chapter 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

storage facilities are followed.

7.1 Precautions for safe handling

Advice on safe handling : In accordance with good industrial hygiene practices,

precautions should be taken to avoid breathing of material.

Use local exhaust extraction over processing area. Avoid unintentional contact with isocyanates to prevent

uncontrolled polymerisation.

Avoid contact with skin, eyes and clothing.

Air-dry contaminated clothing in a well-ventilated area before

laundering.

Do not empty into drains. Handling Temperature:

Ambient.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

Product Transfer : Lines should be purged with nitrogen before and after product

transfer. Keep containers closed when not in use.

Fire-fighting class : III-1

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

Other data Prevent all contact with water and with moist atmosphere.

Tanks must be clean, dry and rust-free. Prevent ingress of water. Must be stored in a diked (bunded) well- ventilated

Version 1.1	Revision Date 10.10.2018	Print Date 06.09.2022
	area, away from sunlight, ignition sou of heat. Nitrogen blanket recommend (capacity 100 m3 or higher). Drums s maximum of 3 high.	led for large tanks

Storage period : 24 month(s)

Storage Temperature: Ambient.

Storage should be handled at temperatures such that viscosities are less than 500 cSt; typically at 25-50 °C. Tanks should be fitted with heating coils in areas where the ambient temperatures are below the recommended product handling temperatures. Heating coil skin temperatures should not

exceed 100 °C.

Packaging material Suitable material: Stainless steel., For container paints, use

epoxy paint, zinc silicate paint.

Unsuitable material: Copper., Copper alloys.

7.3 Specific end use(s)

Specific use(s) : Not applicable.

Ensure that all local regulations regarding handling and

storage facilities are followed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

Biological occupational exposure limits

No biological limit allocated.

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

No DNEL value has been established.

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

Exposure assessments have not been presented for the environment therefore PNEC values not required.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

8.2 Exposure controls

Engineering measures 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:

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Adequate ventilation to control airborne concentrations.

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.

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.

Personal protective equipment

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 : If material is handled such that it could be splashed into eyes,

protective eyewear is recommended. 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,

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber. Incidental contact/Splash protection: PVC, neoprene or nitrile 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 nonperfumed moisturizer is recommended.

Skin and body protection

: Skin protection is not ordinarily required beyond standard

work clothes.

It is good practice to wear chemical resistant gloves.

Respiratory protection

: No respiratory protection is ordinarily required under normal

conditions of use.

In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.

Hygiene measures

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

toilet. Launder contaminated clothing before re-use.

Environmental exposure controls

General advice

 Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

Information on accidental release measures are to be found in section 6.

Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid

contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

> being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid.

: Data not available Colour

Odour : odourless

Odour Threshold : Data not available рH : Data not available Melting / freezing point : Data not available Boiling point/boiling range : Data not available

: > 200 °C Flash point

: Data not available **Evaporation rate** Flammability (solid, gas) : Not applicable

Upper explosion limit : Data not available Lower explosion limit : Data not available

: < 10 hPa Vapour pressure

Relative vapour density : Data not available Relative density : Data not available Density : 1.019 kg/m3 (20 °C)

Solubility(ies)

Water solubility : Slightly soluble. Partition coefficient: n-: Data not available

octanol/water

Auto-ignition temperature : Data not available Decomposition temperature : Data not available

Viscosity

: 760 mPa.s (25 °C) Viscosity, dynamic

: Data not available Viscosity, kinematic **Explosive properties** : Not applicable : Data not available Oxidizing properties

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

9.2 Other information

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

a static accumulator.

Molecular weight : Data not available

SECTION 10: Stability and reactivity

10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

10.2 Chemical stability

No hazardous reaction is expected when handled and stored according to provisions, Hygroscopic.

10.3 Possibility of hazardous reactions

Hazardous reactions : Polymerises exothermically with di-isocyanates at ambient

temperatures.

The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of reaction partners is good or is supported by stirring or by the presence

of solvents.

Reacts with strong oxidising agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames, and sparks.

Product cannot ignite due to static electricity.

10.5 Incompatible materials

Materials to avoid : Avoid contact with isocyanates, copper and copper alloys,

zinc, strong oxidizing agents, and water.

10.6 Hazardous decomposition products

Hazardous decomposition

products

: Unknown toxic products may be formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

SAFETY DATA SHEET

Regulation 1907/2006/EC

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

Basis for assessment : Information given is based on product testing, and/or similar

products, and/or components.

exposure

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

skin or eye contact, and accidental ingestion.

Acute toxicity

Product:

: LD50 : > 5000 mg/kg Acute oral toxicity

Remarks: Low toxicity:

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

: Remarks: Based on available data, the classification criteria Acute inhalation toxicity

are not met.

: LD50 : > 5000 mg/kg Acute dermal toxicity

Remarks: Low toxicity:

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

Skin corrosion/irritation

Product:

Remarks: Not irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Product:

Remarks: Not a skin sensitiser., Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product:

: Remarks: Not mutagenic.

Carcinogenicity

Product:

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

Material	GHS/CLP Carcinogenicity Classification

SAFETY DATA SHEET

Regulation 1907/2006/EC

CARADOL MD46-18

Version 1.1	Revision Date 10.10.2018	Print Date 06.09.2022

Polyalkylene glycol	No carcinogenicity classification.
i oryamiyionio gryoor	The date in egotion, diagonio and in

Reproductive toxicity

Product:

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

STOT - single exposure

Product:

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

STOT - repeated exposure

Product:

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

Aspiration toxicity

Product:

Not an aspiration hazard.

Further information

Product:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

Summary on evaluation of the CMR properties

Germ cell mutagenicity-

: This product does not meet the criteria for classification in

Assessment

categories 1A/1B.

Carcinogenicity -Assessment

: This product does not meet the criteria for classification in

categories 1A/1B.

Reproductive toxicity -

Assessment

: This product does not meet the criteria for classification in

categories 1A/1B.

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

SECTION 12: Ecological information

12.1 Toxicity

Basis for assessment : Incomplete ecotoxicological data are available for this product.

The information given below is based partly on a knowledge of

the components and the ecotoxicology of similar products.

Product:

Toxicity to fish (Acute : LC50 : > 100 mg/l

Remarks: Practically non toxic: toxicity)

Toxicity to crustacean (Acute : EC50 : > 100 mg/l

toxicity)

Remarks: Practically non toxic:

Toxicity to algae/aquatic : EC50 : > 100 mg/l

plants (Acute toxicity) Remarks: Practically non toxic:

Toxicity to fish (Chronic

toxicity)

Toxicity to crustacean : Remarks: Data not available

(Chronic toxicity)

Toxicity to microorganisms

(Acute toxicity)

: IC50 : > 100 mg/l

Remarks: Practically non toxic:

: Remarks: Data not available

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

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable., Oxidises rapidly by

photo-chemical reactions in air.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not have the potential to bioaccumulate

significantly.

Partition coefficient: n-

octanol/water

: Remarks: Data not available

12.4 Mobility in soil

Product:

: Remarks: If the product enters soil, one or more constituents Mobility

will or may be mobile and may contaminate groundwater.

12.5 Results of PBT and vPvB assessment

13 / 18 800010031341

DK

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

Product:

Assessment : The substance does not fulfill all screening criteria for

persistence, bioaccumulation and toxicity and hence is not

considered to be PBT or vPvB.

12.6 Other adverse effects

no data available

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 methods in compliance with applicable regulations.

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

national requirements and must be complied with.

Contaminated packaging : Drain container thoroughly.

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

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

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 Proper shipping name

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

IATA : Not regulated as a dangerous good

14.3 Transport hazard class

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.5 Environmental hazards

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Special Precautions: Refer to Chapter 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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : Z Ship type : 3

Product name : Glycerol, propoxylated and ethoxylated

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.

SECTION 15: Regulatory information

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

Product Registration number : Afventer registrering.

Other regulations : The regulatory information is not intended to be

comprehensive. Other regulations may apply to this material.

Preparation not classified according the Danish Environmental

protection Agency.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), annex XIV.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), annex XVII.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (Seveso III).

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work and its amendments.

Directive 1994/33/EC on the protection of young people at work and its amendments.

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding and its amendments.

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

AIIC : Listed DSL Listed **IECSC** : Listed **ENCS** : Listed KECI : Listed **NZIoC** : Listed **PICCS** : Listed : Listed **TSCA** TCSI : Listed

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this

document can be looked up in reference literature (e.g.

scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial

Hygienists

ADR = European Agreement concerning the International

Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials

BEL = Biological exposure limits

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

CAS = Chemical Abstracts Service

CEFIC = European Chemical Industry Council CLP = Classification Packaging and Labelling

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022

COC = Cleveland Open-Cup

DIN = Deutsches Institut fur Normung

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DSL = Canada Domestic Substance List

EC = European Commission

EC50 = Effective Concentration fifty

ECETOC = European Center on Ecotoxicology and

Toxicology Of Chemicals

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial

Chemical Substances

EL50 = Effective Loading fifty

ENCS = Japanese Existing and New Chemical Substances

Inventory

EWC = European Waste Code

GHS = Globally Harmonised System of Classification and

Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IC50 = Inhibitory Concentration fifty

IL50 = Inhibitory Level fifty

IMDG = International Maritime Dangerous Goods

INV = Chinese Chemicals Inventory

IP346 = Institute of Petroleum test method N° 346 for the

determination of polycyclic aromatics DMSO-extractables

KECI = Korea Existing Chemicals Inventory

LC50 = Lethal Concentration fifty

LD50 = Lethal Dose fifty per cent.

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

LL50 = Lethal Loading fifty

MARPOL = International Convention for the Prevention of

Pollution From Ships

NOEC/NOEL = No Observed Effect Concentration / No

Observed Effect Level

OE_HPV = Occupational Exposure - High Production Volume

PBT = Persistent, Bioaccumulative and Toxic

PICCS = Philippine Inventory of Chemicals and Chemical

Substances

PNEC = Predicted No Effect Concentration

REACH = Registration Evaluation And Authorisation Of

Chemicals

RID = Regulations Relating to International Carriage of

Dangerous Goods by Rail

SKIN DES = Skin Designation

STEL = Short term exposure limit

TRA = Targeted Risk Assessment

TSCA = US Toxic Substances Control Act

TWA = Time-Weighted Average

vPvB = very Persistent and very Bioaccumulative

Further information

SAFETY DATA SHEET

Regulation 1907/2006/EC

CARADOL MD46-18

Version 1.1 Revision Date 10.10.2018 Print Date 06.09.2022 Training advice : Provide adequate information, instruction and training for operators. 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 considered to be PBT or vPvB. A vertical bar (|) in the left margin indicates an amendment from the previous version. : The quoted data are from, but not limited to, one or more Sources of key data used to

Sources of key data used to compile the Safety Data Sheet

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.