

according to UK REACH Regulation

ACMOS 71-100TS

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

1.1. Product identifier

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

Relevant identified uses

Release agent

Uses advised against

Consumer uses: Private households (= general public = consumers)

Sector of uses [SU]: 21

Do not use for private purposes (household).

Relevant identified uses - Further information:

Industrial uses: Uses of substances as such or in preparations at industrial sites

Sector of uses [SU]: 3

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Sector of uses [SU]: 22

The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name: ACMOS CHEMIE KG Street: Industriestrasse 49 Place: D-28199 Bremen

Post-office box: 10 10 69

D-28010 Bremen

Telephone: +49 (0)421-5189-0 Telefax: +49 (0)421-511415

e-mail: acmos@acmos.com Contact person: Mr. Stephan Dryhaus e-mail· sds@acmos.com www.acmos.com Internet:

Responsible Department: Laboratory (Division: Occupational- / Product security) - see under section 16 +49 (0)551 19240 (Emergency information service / official advisory body:

1.4. Emergency telephone number:

Giftinformationszentrum Nord, Universität Göttingen, 24 h from mo. - su.)

Language(s) of Telephone Service: DE, EN

Supplier

Company name: Realwood Machinery & Consumables Limited

Street: Unit 29, Edison Road, St. Ives Place: GB-PE27 3LF Cambridgeshire

Telephone: +44 1480496660 Telefax: +44 1480461366

sales@realwoodmachinery.co.uk e-mail:

Contact person: Mr. David Levett

Internet: www.realwoodmachinery.co.uk

1.4. Emergency telephone number: +44 111 (Emergency information service / official advisory body: National Poisons

Information Service - NPIS Birmingham) (https://www.npis.org)

Language(s) of Telephone Service: EN

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

FUH210 Safety data sheet available on request.

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

2.3. Other hazards



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Adverse physicochemical effects:

See section 9 for physical and chemical properties. This material is combustible, but will not ignite readily.

The product will be applied by spraying.

Adverse human health effects and symptoms: See section 11 for toxicological information.

Adverse environmental effects:

See section 12 for environmental information.

Other adverse effects:

Special danger of slipping by leaking/spilling product.

Results of PBT-/vPvB-assesment:

See under section 12.5 - Results of PBT and vPvB assessment.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Dispersion of active ingredients in mineral oil

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification	•			
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic				
	265-155-0	649-465-00-7	01-2119467170-45		
64-17-5	ethanol (ethyl alcohol)				
	200-578-6	603-002-00-5	01-2119457610-43		
	Flam. Liq. 2, Eye Irrit. 2; H225 H319				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. Limits, M-factors and ATE			
64742-52-5	265-155-0	distillates (petroleum), hydrotreated heavy naphthenic	90 - < 95 %	
	inhalation: LC50 = > 5,53 mg/l (dusts or mists); dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg			
64-17-5	200-578-6	ethanol (ethyl alcohol)	1 - < 5 %	
	inhalation: LC50 : Irrit. 2; H319: >= 5	= 116,9 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 10470 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down.

Take off immediately all contaminated clothing and wash it before reuse.

Put victim at rest, cover with a blanket and keep warm.

Do not leave affected person unattended.

If a person vomits when lying on his back, place him in the recovery position.

If breathing is irregular or stopped, administer artificial respiration.

If unconscious but breathing normally, place in recovery position and seek medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

In the event of cardiac arrest immediately perform cardiopulmonary resuscitation.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Self-protection of the first aider:

Wear personal protection equipment (refer to section 8).

First Aid.



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Notes for the doctor:

No special measures are necessary.

After inhalation

Remove victim out of the danger area.

Provide fresh air.

In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray.

(Auxiloson and Pulmicort are registered trademarks.)

Call a physician immediately.

Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

After contact with skin

Wash immediately with:

Water and soap

Rub greasy ointment into the skin.

Do not wash with:

Solvents/Thinner

In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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

Protect uninjured eye.

After ingestion

Do NOT induce vomiting.

Give nothing to eat or drink.

Never give anything by mouth to an unconscious person or a person with cramps.

Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

The following symptoms may occur:

Cough

Dyspnoea

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water mist

Extinguishing powder (ABC-powder)

Foam

Carbon dioxide (CO2)

Fire class (DIN EN 2): B (Fires of liquids or liquid turning substances).

Unsuitable extinguishing media

Full water jet

Water spray jet

5.2. Special hazards arising from the substance or mixture

In principle, fire gasses of organic materials have to be classified as toxic to the respiratory system.

Hazardous combustion products:

Carbon monoxide

carbon dioxide (CO2)

Hydrocarbons

Pyrolysis products, toxic

5.3. Advice for firefighters

Usual measures of preventive and averting fire protection.

Co-ordinate fire-fighting measures to the fire surroundings.

Do not inhale explosion and combustion gases.

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

Move undamaged containers from immediate hazard area if it can be done safely.

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control.

Use water spray jet to protect personnel and to cool endangered containers.





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Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

DIN-/EN-Norms EN 469

Firefighting protective clothing

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

Prevent further leakage or spillage if safe to do so.

Provide adequate ventilation.

Special danger of slipping by leaking/spilling product.

For non-emergency personnel:

Use personal protection equipment.

Walk out of the danger zone and notify trained personnel.

Emergency procedures:

Keep the factory emergency plan and the information chain.

For emergency responders:

Use personal protection equipment.

The personal protective equipment must be adapted to the situation.

Suitable material:

See under section 8.2 - Personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

Ensure waste is collected and contained.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Other information

For containment:

Repair leaks if without risk.

Move containers from spill area.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Remove from the water surface (e.g. skimming, sucking).

Cover drains.

For cleaning up:

Clean-up methods - large spillage:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Shovel into suitable container for disposal.

Local authorities should be advised if significant spillages cannot be contained.

Clean-up methods - small spillage:

Clear spills immediately.

Wipe up with absorbent material (eg. cloth, fleece).

Collect in closed and suitable containers for disposal.

Clear contaminated areas thoroughly.

Recommended cleansing agent:

Clean with detergents. Avoid solvent cleaners.

Retain contaminated washing water and dispose it.

Ensure all waste water is collected and treated via a waste water treatment plant.

Ventilate affected area.

Suitable material for taking up:

Sand

Kieselguhr

Universal binder



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Absorbing material, organic

Unsuitable material for taking up:

None known

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Measures to prevent aerosol and dust generation:

All work processes must always be designed so that the following is as low as possible:

Inhalation of vapours or spray/mists

Eye contact Skin contact

Technical ventilation of workplace

Provide room air exhaust at ground level.

During filling, metering and sampling should be used if possible:

Devices with local exhaust

Filtered air may be re-circulated into the workroom.

Always close containers tightly after the removal of product.

Advice on protection against fire and explosion

Measures to prevent fire:

The product is: Combustible

Usual measures for fire prevention.

Fire-fighting equipment on the basis of class B.

Further information on handling

Environmental precautions:

Shafts and sewers must be protected from entry of the product.

Transfer wash-downs in sealed containers.

Provide for retaining containers, e.g. floor pan without outflow.

Advices on general occupational hygiene:

Wear personal protection equipment (refer to section 8).

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

General industrial hygiene practice.

Handle in accordance with good industrial hygiene and safety practice.

Working places should be designed to allow cleaning at any time.

Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Clean spray booth and exhaust hood completely with every product change.

When using do not eat, drink, smoke, sniff.

Thorough skin-cleansing after handling the product.

Used working clothes should not be worn outside the work area.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Suitable floor material:

Floors should be impervious, resistant to liquids and easy to clean.

Protect against:

Heat Cold

Recommended storage temperature: +10 ... +30 °C

Keep away from:

Food and feedingstuffs

Packaging materials:

Suitable container/equipment material:

Keep/Store only in original container.

Unsuitable container/equipment material:



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See under section 8.2 - Hand protection.

Hints on joint storage

Do not store together with:

Storage class:

- 1 (Explosive hazardous substances)
- 2 A (Gases (except aerosol dispensers and lighters))
- 5.1 A (Highly oxidising substances)
- 6.2 (Infectious substances)
- 7 (Radioactive substances)

Further information on storage conditions

Technical measures and storage conditions:

The valid water and zoning ordinances must be observed.

Keep in a cool, well-ventilated place.

Keep container tightly closed.

Protect containers against damage.

Ensure adequate ventilation of the storage area.

Do not store outside.

See also instuctions on the label.

7.3. Specific end use(s)

Recommendation:

Possibilities for substitution and references to less hazardous products:

This product was designed for a special application purpose and optimized appropriately.

In case of questions regarding product and application, please contact our field service in line with customer service or our technical sales department.

Observe technical data sheet.

Industrial sector specific solutions:

Hazardous substance information systems of professional associations:

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL

DNEL/DMEL values

DALLIDMEL Values							
CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
64742-52-5	distillates (petroleum), hydrotreated heavy naph	thenic					
Worker DNEL,	long-term	inhalation	local	5,58 mg/m³			
Worker DNEL,	long-term	inhalation	systemic	2,73 mg/m³			
Worker DNEL,	long-term	dermal	systemic	0,97 mg/kg bw/day			
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day			
64-17-5	ethanol (ethyl alcohol)						
Worker DNEL,	long-term	inhalation	systemic	950 mg/m³			
Worker DNEL,	long-term	dermal	systemic	343 mg/kg bw/day			
Consumer DNI	EL, long-term	inhalation	systemic	114 mg/m³			
Consumer DNI	EL, long-term	dermal	systemic	206 mg/kg bw/day			
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day			
Worker DNEL, acute		inhalation	local	1900 mg/m³			
Consumer DNI	Consumer DNEL, acute		local	950 mg/m³			



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PNEC values

CAS No	Substance		
Environmental compartment Value			
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic		
Secondary po	isoning	9,33 mg/kg	
64-17-5	ethanol (ethyl alcohol)		
Freshwater		0,96 mg/l	
Marine water 0,79 mg/l			
Freshwater sediment 3,6 mg/kg			
Marine sedim	2,9 mg/kg		
Secondary po	380 mg/kg		
Micro-organisms in sewage treatment plants (STP) 580			
Soil 0,63 t			

Additional advice on limit values

GESTIS - International Limit Values - Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA):

http://limitvalue.ifa.dguv.de

Country information (EU)

(http://www.dguv.de/ifa/fachinfos/occupational-exposure-limit-values/foreign-and-eu-limit-values/index.jsp)

Country information (GB) (http://www.hse.gov.uk/pubns/books/eh40.htm)

Occupational Exposure Limits of EU-memberstates - European Agency for Safety and Health at Work (OSHA)

(http://osha.europa.eu/en/topics/ds/oel/index.stm/members.stm)

Source of law: EH40 (GB) (http://www.hse.gov.uk)

Recommended monitoring procedures:

Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents (BS EN 14042):

Personal air monitoring

Room air monitoring

Test tube

Preliminary concentration measurements:

Suitable detector tubes for measuring the current concentration in the air at the workplace: DRÄGER test tubes - short-term tubes (http://www.gasmesstechnik.de)

DRÄGER test tubes - Short-term tubes - Alcohol 100 / a (lower alcohols, measuring range: 100 - 3000 ppm, response time: 90 sec) (http://www.gasmesstechnik.de)

Preventive industrial medical examinations are to be offered.

Exposure limits at intended use:

See under section 8.1 - Occupational exposure limit values.

DNEL-/PNEC-values:

There are no exposure scenarios attached in the Appendix of this Safety Data Sheet.

Risk management measures according to used control banding approach:

Control banding for chemicals according to the ILO CHEMICAL CONTROL TOOLKIT (ICCT): ICCT-Guidelines and Control Guidance Sheets (http://www.ilo.org/legacy/english/protection/safework/ctrl_banding/toolkit/main_guide.pdf)

Used model:

Consider appropriate model solutions according to good engineering practices on designing the working process, if available.

8.2. Exposure controls



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Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses:

Technical measures to prevent exposure:

Design of appropriate work processes and engineering controls and the use of adequate materials (working appliance according to the state of the art, optimization of process / spray robots, working appliance for prevention of skin contact, models of working times).

Organisational measures to prevent exposure:

Execution of collective protection measures at source and appropriate organisational measures (local exhaust ventilation, ventilation by technical means, general ventilation, measures on averting a danger at breakdowns / at emergencies / after accidents, first-aid-measures, manner related measures: operating instruction / instruction of employees).

Structural measures to prevent exposure:

Execution of individual and personnel protection measures (personal protective equipment - PPE).

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Technical measures and the application of suitable work processes have priority over personal protection equipment.

References for design of technical equipment:

See under section 7.1 - Precautions for safe handling.

Summary of the risk management measures for exposure scenario:

Use only the following product amount per time unit:

No information available.

Minimum room-width and room-height for handling/application:

No information available.

Minimum room ventilation rate for handling/application (air changes per hour):

No information available.

Individual protection measures, such as personal protective equipment

Eye/face protection

If required according to hazard assessment:

Suitable eye protection:

Eye glasses with side protection (EN 166)

Recommended eye protection articles:

UVEX I-VO / UVEX I-3 / UVEX SUPER OTG

Or comparable articles from other companies.

Hand protection

Skin protection:

Preventive skin protection.:

Draw up skin protection programme.

Before starting work, apply solvent-resistant skincare preparations.

e.g. sansibal® / sansibon®, dualin® (PETER GREVEN PHYSIODERM)

Wash hands before breaks and after work.

e.g. ecosan®, topscrub® soft / topscrub® extra / topscrub® nature (PETER GREVEN PHYSIODERM)

After cleaning apply high-fat content skin care cream.

e.g. physioderm® creme, cura soft® / cUrea soft® (PETER GREVEN PHYSIODERM)

Apply skin care products after work.

If required according to hazard assessment:

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Decrease wearing protection gloves to an inevitable degree to avoid skin rash.

Technical and organizational protective actions have to be preferred.

Breakthrough times and swelling properties of the material must be taken into consideration.

Check leak tightness/impermeability prior to use.

Wear cotton undermitten if possible.





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Change preventive gloves once by hour or use special skin-protective preparations for protective gloves carrier,

e.g. physioderm® proGlove (PETER GREVEN PHYSIODERM)

Take recovery periods for skin regeneration.

Do not wear gloves near rotary machines and tools.

Dispose preventive gloves after defect or expiry of wearing time. Replace when worn.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

Wearing time with permanent contact:

Suitable gloves type

Gloves with long cuffs

Recommended glove articles:

Suitable materials at long term, direct contact (Recommended: Preventive index 6, accordingly > 480 min. permeation time in accordance to EN 374):

Nitrile rubber / NBR (KCL-CAMATRIL VELOURS® - Art. No. 730) - Layer thickness: 0,4 mm Or comparable articles from other companies.

Unsuitable material:

NR (natural rubber, natural latex)

Wearing time with occasional contact (splashes):

Suitable gloves type

Disposable gloves

Recommended glove articles:

Suitable materials at short term contact or splash (Recommended: Preventive index 3, accordingly > 60 min. permeation time in accordance to EN 374):

Disposable gloves of special nitrile rubber / NBR (KCL-DERMATRIL® P - Art. No. 743) - Layer thickness: 0,2 mm Or comparable articles from other companies.

The statements are based on self-tests, literary reference and information of glove manufacturers or have been derived from similar substances by analogy.

Source: CHEMIKALIEN-MANAGER - KCL software for hand protection.

It has to be noticed, that daily time of use of chemical protective gloves may be quite shorter in practice because of many factors of influence (e.g. thermal and mechanical stress as well as special conditions on the floor) than the permeation time determined in accordance to EN 374.

The respective permeation time doubles/halvens at about 1,5 times larger/lower layer thickness.

Declared permeation times according to EN 374 are not carried out under practical conditions. Therefore a maximum wearing time up to 50 % of breakthrough time is recommended.

They relate to the pure solvent as mean component.

Barrier creams are not substitutes for body protection.

Skin protection

If required according to hazard assessment:

Suitable protective clothing:

Overall, Natural fibres (e.g. cotton) (EN 340)

Chemical resistant safety shoes with conductible sole (EN ISO 20345)

Wash contaminated clothing prior to re-use.

Used working clothes should not be worn outside the work area.

Street clothing should be stored separately from work clothing.

Thermal hazards:

No thermal hazards during use of this product.

Respiratory protection

If required according to hazard assessment:

Respiratory protection necessary at:

aerosol or mist formation + exceeding exposure limit values +

high concentrations / prolonged exposure / insufficient ventilation / insufficient exhaust

Use only respiratory protection equipment with CE-symbol including four digit test number.

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m3 (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3:

maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.)

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.





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Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190)

The use of filter equipment requires a minimum oxygen content of 17 Vol-% in the surrounding atmosphere and that the maximum permitted gas concentration - normally 0,5 Vol-% - is not exceeded.

Suitable respiratory protection apparatus:

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

Recommended respiratory protection articles:

Half mask or quarter mask with combination filter A1P1/A2P2 for gases, vapors and particles. (EN 140, EN 14387) Filtering half mask or quarter mask with combination filter FFA1 P1/FFA2P2 for gases, vapors and particles. (EN 405)

Gas filtrating Half-face mask FFA (EN 405)

Model 4251 (FFA1P1 - 1000 ml/m3) / 4255 (FFA2P2SL - 5000 ml/m3) (3M) Half-face mask or Quarter-face mask with gas filter (EN 140, EN 14387)

Filter type 6051 (A1 - 1000 ml/m3) / 6055 (A2 - 5000 ml/m3) (3M)

Full-face mask with gas filter (EN 136, EN 14387)

Gas filter type: A, Indication colour: brown

Or comparable articles from other companies.

Environmental exposure controls

Environmental exposure controls:

Technical measures to prevent exposure:

Discharge exhaust air only with suitable seperators to atmosphere.

Organisational measures to prevent exposure:

Should not be released into the environment.

Structural measures to prevent exposure:

Use the following recovery and/or abatement technique for cleaning waste gases:

none

Further information see under section 6.2 - Environmental precautions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: viscous
Colour: yellow
Odour: characteristic

Test method

Changes in the physical state

Melting point/freezing point: not determined

Boiling point or initial boiling point and boiling > 78 °C literature value

range:

Sublimation point:not applicableSoftening point:not determinedPour point:not determined

Flash point: $> 100 \, ^{\circ}\text{C}$ EN ISO 2719

Flammability

Solid/liquid: not applicable (Liquid)
Gas: not applicable (Liquid)

Explosive properties

not relevant

Lower explosion limits: not relevant Upper explosion limits: not relevant upper explosion limits:

Auto-ignition temperature: > 250 °C literature value

Self-ignition temperature

Solid: Not pyrophoric.
Gas: Not pyrophoric.
Decomposition temperature: not determined

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Oxidizing properties

not relevant

pH-Value: not applicable Viscosity / dynamic: not determined

Viscosity / kinematic: > 20,5 mm²/s DIN 53015

(at 40 °C) Flow time:

(at 23 °C)

Water solubility: partially soluble: < 50 g/L literature value

(at 20 °C)

Solubility in other solvents

miscible with most organic solvents

Partition coefficient n-octanol/water: not applicable (Mixtures)

Vapour pressure: < 0,1 hPa literature value

(at 20 °C)

Vapour pressure: not determined

(at 50 °C)

Density (at 20 °C): 0,9 g/cm3 DIN 51757

Bulk density: not applicable (Liquid) Relative vapour density: not determined

9.2. Other information

Other safety characteristics

Solvent separation test: not applicable Solvent content: not determined Solid content: not determined Evaporation rate: not determined

Further Information

Odour threshold: No data available

Conductivity (ASTM D 2624): No data available

Surface tension: No data available Fat solubility: No data available

Calculated oxidation potential of the mixture (OP): not relevant

Substance group relevant properties:

Data relevant with regard to physical hazard classes (supplemental):

Explosives

not applicable

Flammable gases

Non-flammable. / not applicable (Liquid)

Non-flammable. / not applicable (Liquid)

Oxidising gas

Not oxidising. / not applicable (Liquid)

Gases under pressure

not applicable (Liquid)

Flammable liquids

Non-flammable.

flammable solids

Non-flammable. / not applicable (Liquid)

Self-reactive substances and mixtures

not applicable

Pyrophoric liquids

Not pyrophoric.

Pyrophoric solids

Not pyrophoric. / not applicable (Liquid)

self-heating substances and mixtures

not applicable

Substances or mixtures which, in contact with water, emit flammable gases

not applicable



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Oxidising liquids

Not oxidising.

Oxidising solids

Not oxidising. / not applicable (Liquid)

Organic peroxides

not applicable

Corrosive to metals.

Not corrosive to metals.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is chemically stable under recommended conditions of storage, use and temperature.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Further information see under section 7.2 - Conditions for safe storage, including any incompatibilities.

Further information see under section 10.5 - Incompatible materials.

10.5. Incompatible materials

Violent reaction with:

Oxidising agent, strong

Further information see under section 7.1 - Precautions for safe handling.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

No known hazardous decomposition products.

Under fire conditions: See under section 5.2 - Special hazards arising from the substance or mixture.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

The product has not been tested.

Information on likely routes of exposure /

Symptoms related to the physical, chemical and toxicological characteristics:

See under section 4.2 - Most important symptoms and effects, both acute and delayed.

Exposure route:

In case of ingestion:

Ingestion causes nausea, weakness and central nervous system effects.

In case of skin contact:

non-irritant.

In case of inhalation:

slightly irritant but not relevant for classification.

In case of eye contact:

slightly irritant but not relevant for classification.

Conjunctival redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Not relevant

Interactive effects:

Not relevant

Absence of specific data:

No data is available on the product itself. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

However, some datas are not complete regarding particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected then those which are already mentioned on the label.



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Mixture versus substance information:

Not relevant

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic						
	oral	LD50 mg/kg	> 5000	Rat	ECHA / Supplier	OECD 401	
	dermal	LD50 mg/kg	> 5000	Rabbit	ECHA / Supplier	OECD 402	
	inhalation (4 h) aerosol	LC50 mg/l	> 5,53	Rat	ECHA / Supplier	OECD 403	
64-17-5	ethanol (ethyl alcohol)						
	oral	LD50 mg/kg	10470	Rat	ECHA	OECD 401	
	dermal	LD50 mg/kg	> 2000	Rabbit	Supplier	OECD 402	
	inhalation (4 h) vapour	LC50	116,9 mg/l	Rat	ECHA	OECD 403	

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

Acute (short-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to crustacea:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to algae and cyanobacteria:

There are no data available on the preparation/mixture itself. The product has not been tested.

Chronic (long-term) toxicity to aquatic invertebrate:

There are no data available on the preparation/mixture itself. The product has not been tested. Chronic (long-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.

Toxicity to other aquatic plants/organisms:

No data available (Substances/Ingredient)

Terrestrial toxicity:

Acute and subchronic bird toxicity:

No data available (Substances/Ingredient)

Bird reproduction toxicity:

No data available (Substances/Ingredient)

Acute earthworm toxicity:

No data available (Substances/Ingredient)

Chronical earthworm toxicity (reproduction):

No data available (Substances/Ingredient)

Useful insect toxicity:

No data available (Substances/Ingredient)



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Acute plant toxicity:

No data available (Substances/Ingredient)

Chronic plant toxicity:

No data available (Substances/Ingredient)

Toxicity to soil macroorganisms except of arthropods:

No data available (Substances/Ingredient)

Effects on soil microorganisms:

No data available (Substances/Ingredient)

Behaviour in waste water treatment plants:

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants. Observe local regulations concerning effluent treatment.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic							
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Pimephales promelas	ECHA	OECD 203	
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	ECHA	OECD 201	
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	ECHA	OECD 202	
	Fish toxicity	NOEC	1000 mg/l	14 d	Oncorhynchus mykiss	ECHA	(Q)SAR	
	Algae toxicity	NOEC mg/l	> 100	3 d	Pseudokirchneriella subcapitata	ECHA	OECD 201	
	Crustacea toxicity	NOEC	10 mg/l	21 d	Daphnia magna	ECHA	OECD 211	
64-17-5	ethanol (ethyl alcohol)							
	Acute fish toxicity	LC50 mg/l	15300	96 h	Pimephales promelas	ECHA	EPA method E03-05	
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	ECHA	OECD 201	
	Acute crustacea toxicity	EC50	5012 mg/l	48 h	Ceriodaphnia dubia	ECHA	ASTM E729-80	
	Fish toxicity	NOEC	250 mg/l	5 d	Danio rerio	ECHA	[neurotoxicity]	
	Crustacea toxicity	NOEC	9,6 mg/l	9 d	Daphnia magna	ECHA		
	Acute bacteria toxicity	(> 1000 r	ng/l)	3 h	Activated sludge	ECHA	OECD 209	

12.2. Persistence and degradability

Abiotic degradation:

Physicochemical elimination:

Oxidation:

not applicable (Mixtures)

Hydrolysis:

not applicable (Mixtures)

Photochemical elimination:

Photolysis:

not applicable (Mixtures)

Ozonolysis:

not applicable (Mixtures)

Biodegradation:

not applicable (Mixtures)



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CAS No	Chemical name						
	Method	Value		d	Source		
	Evaluation	•			•		
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic						
	OECD Guideline 301 B	2-8 %	:	28	ECHA		
	not inherently biodegradable						
	OECD Guideline 301 F	31 %	2	28	ECHA		
	inherently biodegradable						
64-17-5	ethanol (ethyl alcohol)						
	BOD standard methods for the examination of water	74 %		5	ECHA		
	readily biodegradable						
	Test type: laboratory (methanol in groundwater) 100 % 25 ECHA						
	readily biodegradable	<u> </u>					

12.3. Bioaccumulative potential

not applicable (Mixtures)

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic	2-6
64-17-5	ethanol (ethyl alcohol)	-0,35

BCF

CAS No	Chemical name	BCF	Species	Source
1	distillates (petroleum), hydrotreated heavy naphthenic	<500		Supplier
64-17-5	ethanol (ethyl alcohol)	< 10	Leuciscus idus melanotus	ECHA

12.4. Mobility in soil

Surface tension:

See under section 9.1 - Information on basic physical and chemical properties.

Distribution:

Water-air (volatility rate, Henry-constant):

not applicable (Mixtures)

Soil-Water (Adsorption coefficient):

not applicable (Mixtures)

Soil-Air (volatility rate):

not applicable (Mixtures)

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.7. Other adverse effects

Ozone depletion potential (ODP):

No data available (Substances/Ingredient)

Photochemical ozone creation potential (POCP):

No data available (Substances/Ingredient)

Global warming potential (GWP):

No data available (Substances/Ingredient)

Endocrine disrupting potential

No data available

AOX: Product does not contain any organic halogens.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste treatment options:

Send to a hazardous waste incinerator facility under observation of official regulations.

Dispose of waste according to applicable legislation.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.



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Properties of waste which render it hazardous:

none

Consult the appropriate local waste disposal expert about waste disposal.

For recycling, contact recycling exchanges.

May not be disposed or deposited together with domestic garbage.

Do not mix with other wastes.

Do not flush into surface water or sanitary sewer system.

Do not dispose of waste into sewer.

Before discharge in public drains (e.g. residues of washing- and rinsing liquids) please observe the relevant regulations. In case of further questions please contact your waste- or environmental representative or the responsible authority.

Clean IBCs or drums at approved facility only.

The waste producer is resposible for correct coding and designation of his wastes.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of proposed waste codes/waste designations in accordance with EWC:

List of Wastes Code - residues/unused products

120115 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; machining sludges other than those mentioned in 12 01 14

List of Wastes Code - used product

120115 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; machining sludges other than those mentioned in 12 01 14

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Other disposal recommendations:

Contaminated packages must be completely emptied and can be re-used following proper cleaning.

Cleaning by recycling company.

Recommended cleansing agent:

Clean with detergents. Avoid solvent cleaners.

Handle contaminated packages in the same way as the substance itself.

Non-contaminated packages may be recycled.

Packing which cannot be properly cleaned must be disposed of.

The conditions of the regional reconditioning companies have to be observed.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not classified for this transport carrier.

Marine transport (IMDG)

Other applicable information (marine transport)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

not relevant

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Other applicable information



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not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 2 % (16 g/l)

Additional information

Authorisations and/or restrictions on use:

Authorisations:

Authorisation of Chemicals (REACH) as regards Annex XIV:

not relevant

Restrictions on use:

Restriction of chemicals (REACH) as regards annex XVII:

not relevant

Informations on Regulation (EC) No. 1272/2008 - Annex VI, Part 1:

Note L is valid: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method"Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

Other regulations (EU):

Regulation (EC) No. 1005/2009 - Substances that deplete the ozone layer:

not relevant

Regulation (EC) No. 648/2004 and No 907/2006 - Detergents:

not relevant

Regulation (EC) No. 649/2012 - Export and import of dangerous chemicals:

not relevant

Regulation (EU) 2019/1021 - Persistent organic pollutants:

not relevant

Regulation (EC) No. 428/2009 and No. 388/2012 and No. 1382/2014 - Control of exports, or transfer, brokering and transit of dual-use goods (Dual-Use Regulation):

not relevant

Regulation (EC) No. 273/2004 - Drug precursors:

not relevant

Regulation (EC) No. 111/2005 - Definition of rules for the monitoring of trade in drug precursors between the Union and third countries:

not relevant

Directive 2012/18/EC - Control of major accident hazards involving dangerous substances (Seveso III):

not relevant

Directive 2004/42/EC - Use of organic solvents in certain paints and lacquers:

not relevant

Directive 2010/75/EU - Industrial Emissions Directive (Directive IE) - succession to Directive 1999/13/EC - Limitation of emissions of volatile organic compounds (VOC-Directive):

When using this substance / mixture it has to be checked whether the activities are subject to the the requirements of IE-RL, Chapter V (installations and activities with the use of organic solvents - VOC).

Aerosol directive (75/324/EEC):

not relevant

Biocide directive (98/8/EC):

not relevant

Regulation (EU) No. 528/2012 on biocides:

not relevant

Observe in addition any national regulations!

EC-Chemical inventories: All ingredients are listed in EINECS / ELINCS or excepted from listing.

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work

protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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Other regulations, restrictions and prohibition regulations:

European product inventories (Registration status on mixtures):

Kemikalieinspektionen / Produktregistret / Swedish Chemicals Inspectorate - Keml (http://www.kemi.se):

This product was not registered.

Schweizerische Eidgenossenschaft - Bundesamt für Gesundheit - BAG (http://www.bag.admin.ch) / Anmeldestelle

Chemikalien (http://www.cheminfo.ch) / Informationssystem für gefährliche und umweltrelevante Stoffe - IGS

(http://igs.naz.ch/index.html):

This product was not registered.

International chemical inventories (Registration status on substances): No data available

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

distillates (petroleum), hydrotreated heavy naphthenic

ethanol (ethyl alcohol)

SECTION 16: Other information

Changes

This version replaces all former issues.

Changes made in this revision see section: 15.

Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

CAS: Chemical Abstracts Service.

CEN: Comité Européen de Normalisation (European Committee for Standardisation).

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

C&L: Classification & Labeling.

DNEL: Derived No-Effect Level.

EAK: European Waste Catalogue (replaced by LoW – see below).

EC50: Effective concentration, 50 percent.

ECHA: European Chemicals Agency.

EC: European community.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European standard.

EWC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EU: European Union.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA-DGR: International Air Transport Association Dangerous Goods Regulations.

IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

(International Bulk Chemical Code).

IC50 / ErC50: Inhibitory concentration, 50 percent.

ICAO-TI: International Cicil Aviation Organization Technical Instruction.

IMDG: International Maritime Dangerous Goods.

ISO: A standard of International Standards Organisation.

IUPAC: International Union for Pure and Applied Chemistry.

LC50: Lethal concentration, 50 percent.

LD50: Lethal Dose, 50 percent.

log Kow (Pow): octanol-water partition coefficient.

LoW: List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm).

MARPOL: Maritime Polluntion Convention (Convention for the Prevention of Pollution from Ships).





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OC: Operational Conditions.

OECD: Organisation for Economic Co-operation and Development.

OSHA: Occupational Safety and Health Agency. PBT: Persistent, bioaccumulabe and toxic. PEC: Predicted Effect Concentration. PNEC: Predicted No-Effect Concentration.

(Q)SAR: Quantitative-Structure-Activity-Relationship.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals; Regulation (EC) No 1907/2006.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

RMM: Risk Management Measure. STEL: Short time exposure limit.

PPE: Personal Protection Equipment.

SVHC: Substances of Very High Concern.

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure. STOT - SE: Specific Target Organ Toxicity - Single Exposure.

TWA: Time Weighted Average.

vPvB: Very persistent and very bioaccumulable.

WoE: Weight of Evidence.

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.H319 Causes serious eye irritation.

EUH210 Safety data sheet available on request.

Further Information

Full text of all R-, H-, EUH-phrases which are referred to in section 2 and 3 of this safety data sheet - see previous list. These (this) R-, H-, EUH-phrases/R-, H-, EUH-phrase apply/applies to the substance(s) of content, however, it does not necessarily show the classification of the product.

Key literature references and sources for data:

The classification corresponds to current EC-lists, but is completed by statements of technical literature and company data.

Other public accessible sources:

Regulation (EC) No. 1907/2006 (REACH) in the valid version in each case Regulation (EC) No. 1272/2008 (CLP) in the valid version in each case

Further information and practical guides on the internet:

European Chemicals Agency - ECHA (http://echa.europa.eu)

ECHA - Information on Chemicals (http://echa.europa.eu/information-on-chemicals)

ECHA - Candidate List of Substances of Very High Concern for Authorisation

(http://echa.europa.eu/de/candidate-list-table)

ECHA - List of restrictions table

(http://echa.europa.eu/de/addressing-chemicals-of-concern/restrictions/list-of-restrictions/list-of-restrictions-table)

ECHA - Authorisation List

(http://echa.europa.eu/hr/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list)

ECHA - C&L Inventory (http://echa.europa.eu/en/web/guest/regulations/clp/cl-inventory)

eChemPortal (http://www.echemportal.org)

The access to European Union law - EUR-Lex (http://eur-lex.europa.eu)

Health and Safety Executive (http://www.hse.gov.uk) / Control of Substances Hazardous to Health Regulations - COSHH (http://www.coshh-essentials.org.uk/Home.asp)

Pollution Prevention and Control Act and Pollution Prevention and Control Regulations

Recommended restriction of application:

See under section 1.2 - Uses advised against.

Use this product only for intended purpose in accordance with our product informations.

Please refer to our internet website for more information (http://www.acmos.com).

Training advice:

Yearly briefing and instruction of employees by means of operating instructions according to article 8 of EC-directive 98/24/EC.





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Inquiry office: Laboratory (Division: Occupational-/Product security)

Contact person: Mr. Dryhaus (Telephone: +49-421-5189-0, Telefax: +49-421-5189-871)

Office hours: Mo - Th from 7.30 - 16.15 h and Fr from 7.30 - 13.30 h. Out of office hours no call diversion.

Disclaimer:

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