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

1.1 Product identifier

Spengler 390

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

1.2.1 Relevant uses

Sealing material

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company Ramsauer GmbH & Co KG

Sarstein 17

4822 Bad Goisern / H. / AUSTRIA Phone +43(0)6135 8205-0 Fax +43(0)6135 8205-250 Homepage www.ramsauer.at E-mail office@ramsauer.at

Address enquiries to

Technical informationoffice@ramsauer.atSafety Data Sheetsdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +43 (0) 1 406 43 43 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Flam. Liq. 3: H226 Flammable liquid and vapour. STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

Signal word

Contains:

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms



WARNING n-Butyl acetate

Hazard statements H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P261 Avoid breathing vapours.

Special labelling EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Environmental hazardsDoes not contain any PBT or vPvB substances.

Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

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3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - <50	Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)
	CAS: 64742-54-7, EINECS/ELINCS: 265-157-1, EU-INDEX: 649-467-00-8, Reg-No.: 01-2119484627-25-XXXX
	GHS/CLP: Asp. Tox. 1: H304
20 - <30	n-Butyl acetate
	CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H336

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.

In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.

Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Ingestion Get medical advice.

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Headache Nausea, vomiting. Drowsiness Vertigo

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.

Water spray jet.
Foam.
Dry powder.

Extinguishing media that must not

be used

Full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:

Carbon monoxide (CO). Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Do not inhale explosion and/or combustion gases.

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance within

the local regulations.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.

Ensure adequate ventilation.

High risk of slipping due to leakage/spillage of product.

Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

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

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).

Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Avoid spilling or spraying in enclosed areas.

Use solvent-resistant equipment.

Keep away from all sources of ignition - Refrain from smoking.

Take precautionary measures against static discharges.

Apparates and equipments must be conform in accordance to standard of storage and

handling of flammable products.

Vapours can form an explosive mixture with air.

Do not eat, drink, smoke or take drugs at work.

Wash hands before breaks and after work.

Use barrier skin cream.

Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.

Keep only in original container.

Prevent penetration into the ground.

Do not store with combustible materials.

Do not store together with oxidizing agents.

Protect from heat/overheating and from sun.

Do not keep at temperatures above 50 °C.

Keep container in a well-ventilated place.

Keep container tightly closed.

7.3 Specific end use(s)

See product use, SECTION 1.2

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)

CAS: 64742-54-7, EINECS/ELINCS: 265-157-1, EU-INDEX: 649-467-00-8, Reg-No.: 01-2119484627-25-XXXX

Long-term exposure: 5 mg/m³, oil mist

Short-term exposure (15-minute): 10 mg/m³

n-Butyl acetate

CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX

Long-term exposure: 150 ppm, 724 mg/m³

Short-term exposure (15-minute): 200 ppm, 966 mg/m³

Silicon dioxide

CAS: 7631-86-9. EINECS/ELINCS: 231-545-4

Long-term exposure: 6 mg/m³, total inhalable dust

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES

n-Butyl acetate

CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX

Eight hours: 50 ppm, 241 mg/m³

Short-term (15-minute): 150 ppm, 723 mg/m³

DNEL

Substance

n-Butyl acetate, CAS: 123-86-4

Industrial, inhalative (vapor), Acute - local effects, 600 mg/m³,

Industrial, inhalative (vapor), Long-term - local effects, 300 mg/m³,

Industrial, inhalative (vapor), Acute - systemic effects, 600 mg/m³,

Industrial, dermal, Long-term - systemic effects, 11 mg/kg bw/day,

Industrial, dermal, Acute - systemic effects, 11 mg/kg bw/day,

Industrial, inhalative (vapor), Long-term - systemic effects, 300 mg/m³,

general population, dermal, Acute - systemic effects, 6 mg/kg bw/day,

general population, inhalative (vapor), Long-term - systemic effects, 35,7 mg/m³,

general population, inhalative (vapor), Acute - systemic effects, 300 mg/m³,

general population, dermal, Long-term - systemic effects, 6 mg/kg bw/day, general population, inhalative (vapor), Acute - local effects, 300 mg/m³,

general population, oral, Long-term - systemic effects, 2 mg/kg bw/day,

general population, oral, Acute - systemic effects, 2 mg/kg bw/day,

general population, inhalative (vapor), Long-term - local effects, 35,7 mg/m³,

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

Industrial, inhalative, Long-term - systemic effects, 2,7 mg/m³,

Industrial, inhalative, Long-term - local effects, 5,6 mg/m³,

Industrial, dermal, Long-term - systemic effects, 1 mg/kg bw/day,

general population, oral, Long-term - systemic effects, 0,74 mg/kg bw/day

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Substance

n-Butyl acetate, CAS: 123-86-4

soil, 0,09 mg/kg/dw,

sediment (seawater), 0,098 mg/kg/ dw,

sediment (freshwater), 0,981 mg/kg/dw,

sewage treatment plants (STP), 35,6 mg/L (AF= 10),

seawater, 0,018 mg/L (AF= 1000),

freshwater, 0,18 mg/L (AF= 100),

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

oral (food), 9,33 mg/kg

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Measurement methods for taking workplace measurements must meet the performance

requirements of DIN EN 482. For example, recommendations are given in the IFA's list of

hazardous substances.

Eye protection Safety glasses. (EN 166:2001)

Hand protection The details concerned are recommendations. Please contact the glove supplier for further

information

0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3). 0,7 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).

Skin protection Light protective clothing.

Other Do not inhale gases/vapours/aerosols.

Avoid contact with eyes and skin.

Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to

chemicals should be ascertained with the respective supplier.

Respiratory protection In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear

appropriate respiratory protection.

Short term: filter apparatus, filter A. (DIN EN 14387)

Thermal hazards not determined

Delimitation and monitoring of the

environmental exposition

Protect the environment by applying appropriate control measures to prevent or limit

emissions.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state pasty Color various Odor characteristic **Odour threshold** not determined pH-value not determined not determined pH-value [1%] Boiling point [°C] not determined Flash point [°C] 23 - 60

Flammability (solid, gas) [°C] not determined Lower explosion limit 1,2 Vol.-% Upper explosion limit 7,5 Vol.-%

Oxidising properties no

Vapour pressure/gas pressure [kPa] not determined Density [g/ml] 0,93 (20 $^{\circ}$ C / 68,0 $^{\circ}$ F)

Bulk density [kg/m³] not applicable
Solubility in water immiscible

Solubility other solvents No information available.

Partition coefficient [n-octanol/water] not determined

Kinematic viscosity 15000 mPas (20°C)

Relative vapour density not determined

Evaporation speed not determined

Melting point [°C] not determined

Auto-ignition temperature not determined

Decomposition temperature [°C] not determined

Particle characteristics No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with acids, alkalies and oxidizing agents.

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.4 Conditions to avoid

Strong heating.
See SECTION 7.2.

10.5 Incompatible materials

Strong oxidizing agent.

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10.6 Hazardous decomposition products

Flammable gases/vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

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

Substance

n-Butyl acetate, CAS: 123-86-4

LD50, oral, Rat, 10760 mg/kg (OECD 423).

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

LD50, oral, Rat, > 5000 mg/kg

Acute dermal toxicity

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

Substance

n-Butyl acetate, CAS: 123-86-4

LD50, dermal, Rabbit, >14112 mg/kg (OECD 402)

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

LD50, dermal, Rabbit, > 2000 mg/kg

LC50, dermal, Rat, 2,18 mg/l

Acute inhalational toxicity

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

Substance

n-Butyl acetate, CAS: 123-86-4

LC50, inhalative, Rat, 23,4 mg/l (4h) (OECD 403)

Serious eye damage/irritation Does not contain a relevant substance that meets the classification criteria.

Skin corrosion/irritation Does not contain a relevant substance that meets the classification criteria.

Respiratory or skin sensitisation Does not contain a relevant substance that meets the classification criteria.

Specific target organ toxicity —

single exposure

Based on the available information, the classification criteria are fulfilled.

Toxicological data of complete product are not available.

Vapours may cause drowsiness and dizziness.

Calculation method

Specific target organ toxicity —

repeated exposure

Does not contain a relevant substance that meets the classification criteria.

Does not contain a relevant substance that meets the classification criteria. Mutagenicity Reproduction toxicity Does not contain a relevant substance that meets the classification criteria.

Carcinogenicity Does not contain a relevant substance that meets the classification criteria.

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

 $v > 20,5 \text{ mm}^2/\text{s} (40 °C)$

General remarks Frequent persistent contact with the skin can cause skin irritation.

> The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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SECTION 12: Ecological information

12.1 Toxicity

n-Butyl acetate, CAS: 123-86-4

LC50, (96h), Pimephales promelas, 18 mg/l (OECD 203),

EC50, (72h), Desmodesmus subspicatus, 647,7 mg/l,

EC50, (48h), Daphnia magna, 44 mg/l,

IC50, Bacteria, 356 mg/l (40 h),

NOEC, Desmodesmus subspicatus, 200 mg/l,

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

EL50, (24h), Daphnia magna, > 10000 mg/l,

NOELR, (14d), Oncorhynchus mykiss, >= 1000 mg/l,

LL50, (96h), Pimephales promelas, >100 mg/l,

NOEL, (72h), Pseudokirchneriella subcapitata, >= 100 mg/l,

NOEL, (21d), Daphnia magna, 10 mg/l,

12.2 Persistence and degradability

Behaviour in environment

compartments

not determined

Behaviour in sewage plant

not determined

Biological degradability

not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not applicable

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.

Do not discharge product unmonitored into the environment.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Coordinate disposal with the authorities if necessary.

Waste no. (recommended)

080409*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Dispose full / partially emptied cartridges as hazardous waste in accordance with official

regulations.

Waste no. (recommended)

150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number

Transport by land according to

ADR/RID

1133

Inland navigation (ADN)

1133

Marine transport in accordance with

IMDG

1133

Air transport in accordance with IATA 1133

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14.2 UN proper shipping name

Transport by land according to

ADR/RID

Adhesives (No dangerous goods, according ADR 2.2.3.1.5 to max. 450 l)

- Classification Code

F1

- Label

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (D/E)

Inland navigation (ADN)

Adhesives (No dangerous goods, according ADR 2.2.3.1.5 to max. 450 l)

- Classification Code

F1

- Label



Marine transport in accordance with **IMDG**

Adhesives (No dangerous goods, according IMDG 2.3.2.5 to max. 30 I (see 5.4.1.5.10))

- EMS

F-E. S-D

- Label



- IMDG LQ

Air transport in accordance with IATA Adhesives

- Label



14.3 Transport hazard class(es)

Transport by land according to

ADR/RID

Inland navigation (ADN)

3

Marine transport in accordance with 3

Air transport in accordance with IATA 3

14.4 Packing group

Transport by land according to

ADR/RID

Ш

Inland navigation (ADN)

Ш

Marine transport in accordance with

IMDG

Air transport in accordance with IATA III

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14.5 Environmental hazards

Transport by land according to

ADR/RID

no

Inland navigation (ADN)

no

Marine transport in accordance with

IMDG

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not determined

SECTION 15: Regulatory information

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

EEC-REGULATIONS 2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006

(REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131;

(EU) 517/2014

TRANSPORT-REGULATIONS ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions

for people

Observe employment restrictions for young people.

- VOC (2010/75/CE) ca. 24 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H336 May cause drowsiness or dizziness.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

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16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ATE = acute toxicity estimate

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging

DMEL = Derived Minimum Effect Level

DNEL = Derived No Effect Level EC50 = Median effective concentration

ECB = European Chemicals Bureau

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

EL50 = Median effective loading

ELINCS = European List of Notified Chemical Substances

EmS = Emergency Schedules

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC-Code = International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk

IC50 = Inhibition concentration, 50%

IMDG = International Maritime Code for Dangerous Goods

IUCLID = International Uniform ChemicaL Information Database

IVIS = In vitro irritation score

LC50 = Lethal concentration, 50%

LD50 = Median lethal dose

LC0 = lethal concentration, 0%

LOAEL = lowest-observed-adverse-effect level

LL50 = Median lethal loading

LQ = Limited Quantities

MARPOL = International Convention for the Prevention of Marine Pollution from Ships

NOAEL = No Observed Adverse Effect Level NOEC = No Observed Effect Concentration

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC = Predicted No-Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

STP = Sewage Treatment Plant

TLV®/TWA = Threshold limit value – time-weighted average TLV®STEL = Threshold limit value – short-time exposure limit

VOC = Volatile Organic Compounds

vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 3: H226 Flammable liquid and vapour. (On basis of test data) STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)

Modified position

SECTION 2 been added: Contains no ingredients with endocrine-disrupting properties.

SECTION 2 been added: Further hazards were not determined with the current level of knowledge.

SECTION 6 been added: Use personal protective equipment (protective gloves, safety glasses, protective clothing).

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.

Safety Data Sheet 1907/2006/EC - REACH (GB) Spengler 390

Ramsauer GmbH & Co KG 4822 Bad Goisern / H.

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