

according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004

Revision date 25. October 2019 Version 3

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

**1.1. Product identifier** DENSOCURE R forte

Substance / mixture mixture Number 2-11

UFI UN40-40SV-D00K-JPF7

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

Mixture's intended use paint for concrete

Mixture uses advised against

The product should not be used in ways other then those

referred in Section 1.

EuPCS PC-PNT-3

## 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Name or trade name BETOSAN s.r.o.

Address Na Dolinách 28, Praha 4, 147 00

Czech Republic

Identification number (CRN)48028177VAT Reg NoCZ48028177Phone241 431 212E-mailpraha@betosan.czWeb addresswww.betosan.cz

#### Competent person responsible for the safety data sheet

Name BETOSAN s.r.o. E-mail praha@betosan.cz

## 1.4. Emergency telephone number

not available

## **SECTION 2: Hazards identification**

#### . Classification of the substance or mixture

## Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT RE 2, H373

Full text of all classifications and hazard statements is given in the section 16.

## Most serious adverse physico-chemical effects

Flammable liquid and vapour.

## Most serious adverse effects on human health and the environment

Causes skin irritation. May cause damage to organs through prolonged or repeated exposure.

### 2.2. Label elements

## **Hazard pictogram**







## Signal word

Warning

#### **Hazardous substances**

[A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C9 through C12 and boiling in the range of approximately 140  $^{\circ}$ C to 220  $^{\circ}$ C (284  $^{\circ}$ F to 428  $^{\circ}$ F).]



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004
Revision date 25. October 2019 Version 3

**Hazard statements** 

H226 Flammable liquid and vapour. H315 Causes skin irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements** 

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

smoking.

P260 Do not breathe vapours.

P264 Wash hands and exposed parts of the body thoroughly after handling.

P280 Wear protective gloves.

P321 Specific treatment (see additional first aid instructions on this label).
P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

#### 2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

## **Chemical characterization**

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7	xylene	10-25	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	1
Index: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1	n-butyl acetate	2,5-10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH 066	
Index: 649-405-00-X CAS: 64742-88-7 EC: 265-191-7	[A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C9 through C12 and boiling in the range of approximately 140 °C to 220 °C (284 °F to 428 °F).]	2,5	Asp. Tox. 1, H304	

## **Notes**

1 Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Full text of all classifications and hazard statements is given in the section 16.

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004

Revision date 25. October 2019 Version 3

#### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Rinse skin with water/shower.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

#### If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

#### If inhaled

Cough, headache.

#### If on skin

Causes skin irritation.

## If in eyes

Not expected.

#### If swallowed

Irritation, nausea.

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

Symptomatic treatment.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

## Unsuitable extinguishing media

Water - full jet.

# 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

## 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

## 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004

Revision date 25. October 2019 Version 3

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Do not inhale aerosols. Prevent contact with skin and eyes. No smoking. Use only non-sparking tools. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Keep container tightly closed. Keep cool.

Storage class

Content

Material of package

3A - Flammable liquids (flash point below 55 °C)

9 ka

FE (40), Steel (Metals)



FE

### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

### 7.3. Specific end use(s)

not available

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

## **European Union**

Substance name (component)	Туре	Time of exposure	Value	Note	Source
	OEL	8 hours	221 mg/m³		směrnice EU
valence (CAS: 1220-20-7)	OEL	8 hours	50 ppm		
xylene (CAS: 1330-20-7)	OEL	Short-term	442 mg/m³		
	OEL	Short-term	100 ppm		

## 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

# Eye/face protection

Protective goggles.

### Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Page



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004 Revision date 25. October 2019

25. October 2019 Version 3

### **Respiratory protection**

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

#### Thermal hazard

Not available.

#### **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance

Physical state liquid at 20°C color data not available
Odour data not available
Odour threshold data not available
pH data not available
Melting point/freezing point data not available
Initial boiling point and boiling range data not available

Flash point 29 °C

Evaporation rate data not available

Flammability (solid, gas) Flammable liquid and vapour.

Upper/lower flammability or explosive limits

flammability limits data not available explosive limits data not available Vapour pressure data not available Vapour density data not available Relative density data not available

Solubility(ies)

solubility in water data not available solubility in fats data not available Partition coefficient: n-octanol/water data not available Auto-ignition temperature data not available Decomposition temperature data not available data not available Viscosity data not available Explosive properties Oxidising properties data not available

9.2. Other information

Density  $0.86 \text{ g/cm}^3$  ignition temperature 370 °C combustion temperature 35 °C

### **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

not available

## 10.2. Chemical stability

The product is stable under normal conditions.

## 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004

Revision date 25. October 2019 Version 3

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

No toxicological data is available for the mixture.

### **Acute toxicity**

Based on available data the classification criteria are not met.

## xylene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD50	4300 mg/kg		Rat	
Dermal	LD50	3200 mg/kg		Rabbit	

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/irritation

Based on available data the classification criteria are not met.

#### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

## Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

## Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

### **SECTION 12: Ecological information**

## 12.1. Toxicity

## **Acute toxicity**

Data for the mixture are not available.

## xylene

Parameter	Value	Time of exposure	Species	Environment
LC50	26.7 mg/l		Fishes (Pimephales promelas)	

## 12.2. Persistence and degradability

Data not available.

## 12.3. Bioaccumulative potential



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004

Revision date 25. October 2019 Version 3

Not available.

## 12.4. Mobility in soil

Not available.

#### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

#### 12.6. Other adverse effects

Not available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

08 01 11 waste paint and varnish containing organic solvents or other dangerous substances

### Packaging waste type code

15 01 10 packaging containing residues of or contaminated by dangerous substances

## **SECTION 14: Transport information**

### 14.1. UN number

UN 1139

### 14.2. UN proper shipping name

COATING SOLUTION

#### 14.3. Transport hazard class(es)

3 Flammable liquids

#### 14.4. Packing group

III - substances presenting low danger

## 14.5. Environmental hazards

not available

#### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

### **Additional information**

Hazard identification No.

UN number

Classification code

Safety signs

33 (Kemler Code) 1139

F1





according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE** R forte

Creation date 02. May 2004
Revision date 25. October 2019 Version 3

## **SECTION 15: Regulatory information**

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

#### 15.2. Chemical safety assessment

not available

#### **SECTION 16: Other information**

### A list of standard risk phrases used in the safety data sheet

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

#### Guidelines for safe handling used in the safety data sheet

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

smoking.

P260 Do not breathe vapours.

P264 Wash hands and exposed parts of the body thoroughly after handling.

P280 Wear protective gloves.

P321 Specific treatment (see additional first aid instructions on this label).
P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

## A list of additional standard phrases used in the safety data sheet

EUH 066 Repeated exposure may cause skin dryness or cracking.

## Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

#### Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and

mixtures

DNEL Derived no-effect level

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying Dangerous

Chemicals

IC50 Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry



according to Regulation (EC) No 1907/2006 (REACH) as amended

## **DENSOCURE R forte**

Creation date	02. May 2004			
Revision date	25. October 2019	Version	3	

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the population

LOAEC Lowest observed adverse effect concentration

LOAEL Lowest observed adverse effect level log Kow Octanol-water partition coefficient

MARPOL International Convention for the Prevention of Pollution From Ships

NOAEC No observed adverse effect concentration

NOAEL No observed adverse effect level NOEC No observed effect concentration

NOEL No observed effect level OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic PNEC Predicted no-effect concentration

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN Model

Regulations

UVCB Substances of unknown or variable composition, complex reaction products or biological

materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity
Asp. Tox. Aspiration hazard
Flam. Liq. Flammable liquid
Skin Irrit. Skin irritation

STOT RE Specific target organ toxicity - repeated exposure STOT SE Specific target organ toxicity - single exposure

## **Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

## **Recommended restrictions of use**

not available

## Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### More information

Classification procedure - calculation method.

#### **Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.