

SAFETY DATA SHEET according to Regulation (EC) No 1907/2006 1 / 13

REZISTOL basic VA TC Review No:9/ 11

Date of first revision: 06-03-07 Date of revision:28-02-17 Date of printing:25-04-17

1.1. Product identifier

Trade name: REZISTOL basic VA TC

Product code: 409945

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

Principal use: Vinyl acrylic enamel

Used as a topcoat in coating systems for shipping and accommodation containers and for industrial lacquering of metal surfaces where extremely fast drying and high quality corrosion protection is required.

The product is intended for professional and industrial use.

Use: airless spraying; air spraying; brush/roller

1.3 Supplier details of the safety data sheet

Supplier:

Responsible person: Helios Coatings Hungary Kft., 5000 Szolnok, Nagysándor József út. 15742/15,
No.,

T: 06 56 514 776, 06 56 413 585

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Količevo 65 - 1230 Domžale, Slovenija

T +386 1 722 40 00 F +386 1 722 43 10

Responsible person: Matija Podobnik, e-mail: matija.podobnik@helios.si

1.4. Emergency telephone number

Phone: ETPC 1097 Budapest, Nagyvárad tér 2.

Tel. 06-80-20-11-99 Toll-free number ZÖLD SZÁM

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Hazard category Flammable liquids 2

Serious eye damage/eye irritation 2 Target organ toxicity - single exposure 3

Hazardous to aquatic environment - chronic, 3.

2.2 Labelling elements EU 1272/2008:

Warning Danger

Hazard phrases (H-phrases) H225 - Highly flammable liquid and vapour. H319 - Causes severe eye irritation.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H412 - Harmful to aquatic life, causes long-term adverse effects.

Safety advice. P261 - Avoid inhalation of dust/fumes/gas/mist/vapours/spray. P273 - Avoid release to the environment. P304+P340 - IN CASE OF INHALATION: Remove to fresh air and place the exposed person in a resting position where he/she can breathe easily. P305+P351+P338 - IN CASE OF EYE INJECTION: Rinse gently with water for several minutes. If necessary, remove contact lenses if they are easily

removed/discarded immediately. P361 - All contaminated clothing must be removed/discarded immediately.

2.3 Other hazards

The product contains organic solvents.

EUH066 Repeated exposure may cause skin drying or cracking.

3.2. Mixtures

Chemical composition: binder in organic solvent

Chemical name Concentration [wt %] CAS EINECS EU INDEX

REACH reg.no. Classification (Regulation (EC) No 1272/2008)

Comments

n-butyl acetate 20-29,99 123-86-4

204-658-1

607-025-00-1

01-2119485493-29 STOT a. 3; H336

Flammable liquid 3; H226

hydrocarbon, C9 aromatic compound 10-19,99 -

918-668-5

-

01-2119455851-35 Aquatic, chronic 2, H 411

Asp. take. 1, H 304 STOT a. 3; H336 STOT a. 3; H335

Flamm. fl. 3; H226 P

2-butanone 10-19,99 78-93-3

201-159-0

606-002-00-3

01-2119457290-43 STOT a. 3; H336

Skin irritant 2; H319 Flammable 2; H225

reaction mixture of ethylbenzene, m-xylene and p-xylene 5,0-9,99 -

905-562-9

- Asp. take. 1, H 304 STOT ism. 2; H373 STOT egy. 3; H335

01-2119555267-33 Skin irritant 2; H319 Skin irritant 2; H315 Acute toxicity 4; H332 Acute tox. 4; H312 Flamm. fl. 3; H226

Comments.

The text of the H phrases for the ingredients is given in section 16.

4.1 Description of first aid measures

In case of inhalation: In case of any symptoms, remove the casualty to fresh air.

In case of skin contact: Remove contaminated clothing. Wash skin with soap and water. Do not use organic solvents or thinners.

In case of eye contact: Open the eyelids with clean fingers and wash the eyes with water (medium to lukewarm water jet). In the meantime, rotate the eye so that the water reaches all parts of the eye. If your eyes water, seek medical advice.

In case of ingestion. Do not swallow. Do not vomit.

4.2. Main acute and delayed symptoms and effects

Inhalation: Respiratory irritation, cough, burning sensation in the nasal cavity.

Skin contact: Prolonged exposure (contact) to the product causes loss of fat from the skin which may cause inflammation of the skin.

Contact with eyes.

Redness, tearing, and irritation in sensitive individuals.

Ingestion: in case of large amounts of ingested product, sensitive individuals may experience nausea, vomiting and diarrhea.

4.3 Indications of immediate medical attention and special care required

No data available.

5.1.

Extinguishing media: ALKALMAS: Foam, powder, carbon dioxide, inert gas or INERGEN FM 200 (in the initial phase of fire extinguishing, water mist.

NON-ALCOID: Water spray, except when the water spray is used ONLY for cooling containers containing flammable products. Remove all ignition sources: open flames, burning cigarettes, sparking tools and equipment. Seal the packaging envelope.

Remove all ignition sources: open flame, burning cigarettes, sparking tools and equipment. Seal the packing case.

Do not use extinguishing agent: open water jet

5.2. Special hazards arising from the substance or mixture

Specific methods of extinguishing fires: Fire extinguishing must be carried out in the direction of the wind. Cool the non-combustible container containing the product with water spray, prevent spillage and place in a safe place. There is a possibility that the fire may be ignited.

fumes and thick smoke harmful to the body. The use of a protective mask lined with an "A" filter is recommended.

5.3 Recommendation for firefighters

Special equipment for the protection of firefighters: compressed air self-contained fire extinguisher, full firefighting equipment for body protection.

6.1 Personal precautions, personal protective equipment and emergency procedures

Personal precautions: Remove sources of ignition (flame, burning cigarettes, sparks, etc.). Protect respiratory organs from inhalation of vapours. Ensure thorough ventilation.

6.2 Environmental precautions

Precautions for environmental protection.

Prevent the release of vapours into living water, reservoirs, cellars, caves or sewers and the release of vapours into enclosed spaces.

accumulation of vapours in confined spaces.

6.3 Methods and materials for containment and decontamination

Clean-up methods: Spillage shall be absorbed by soil, sand or other absorbent material. The removal of the waste should be entrusted to an authorised waste collector.

7.1 Precautions for safe handling

Personal precautions: When used, the vapours of the product may form a flammable/explosive mixture by mixing the volatile substance with air. Static electricity may be generated during pumping. Static electrical discharge may cause fire. When pouring large quantities, care must be taken to ground the entire equipment and ensure conductivity. Avoid contact with radiating bodies, sparks, flame and

sources of ignition.

Safe handling advice: do not smoke, drink or eat while handling the product. Do not breathe, avoid contact with skin and eyes. Wear cotton protective clothing or overalls, nitrile rubber gloves.

and goggles with side protection.

7.2 Conditions for safe storage, including possible incompatibility

Technical measures and conditions. Store in a tightly closed container in a dry and ventilated place and under the conditions indicated on the label. The roll must be marked with the original supplier's label. SHOULD NOT BE EXPOSED TO DIRECT SUNLIGHT.

REQUIRED:

Keep container tightly closed in a cool, ventilated place. Protect against static build-up.

NOT REQUIRED:

Storage in a room with chemicals (oxidants, acids) may cause fire. Do not use sparking tools or machinery in the storage area.

Storage class: 3A

7.3 Specified end use(s)

Packaging materials: RECOMMENDED: Use metal-protected packaging.

NOT APPLICABLE: Butyl, nitrile and natural rubber should not be used for long-term storage. Do not use nitrile, nitrile, nitrile-free, nitrile-free, nitrile-free or other non-metallic materials for storage. ...

Do not use sparking tools to cut empty packaging material.

8.1 Control parameters

No specific information available

8.1.1 Exposure limit values

Pursuant to Article 7(6) of Joint Decree 25/2000 (IX.30.) EüM-SzCsM, in the case of dangerous substances not subject to limit values, the employer shall reduce the level of exposure to the lowest

level that can be expected in accordance with the state of scientific and technical knowledge, at which level the dangerous substance has no harmful effects on health.

EXPOSURE EXPOSURE LEVEL (occupational exposure limit value)

Name of the dangerous substance CAS No AK value (mg/m³) CK value (mg/m³)

n-butyl acetate 123-86-4 950 950

2-butanone 78-93-3 600 900

AC: average concentration in the workplace air per shift

CK: peak allowable concentration, maximum allowable air pollution for a short period of time within a shift

b: may be absorbed through the skin. The MAC values take into account this property of dangerous substances and the resulting exposure only to the extent of their airborne concentration; s: substance with sensitising properties (in sensitive individuals

may cause skin, respiratory or other organ/organ system damage based on "hypersensitivity");

i: irritant (irritates the skin, mucous membranes, eyes or all three);

mg/m³ per milligram per cubic metre of air at 20 °C and 101,3 KPa atmospheric pressure Permissible limits for biological exposure (effect) indicators

Chemical name Characteristic warning | Biological sample | Sampling time | Biological limit value

reaction mixture of ethylbenzene, m-xylene and p-xylene reaction mixture of ethylbenzene, m-xylene and p-xylene | blood | after shift 14,13 mmol/l

DNEL = derived no-effect level Data on ingredients:

Chemical name Population, exposure, effect, value, (units)

n-butyl acetate Workers Short-acting inhalation Systemic effects 960 mg/m³ Workers Short-acting inhalation Local effects 960 mg/m³

Workers Long-term inhalation systemic effects 480 mg/m³ Workers Long-term inhalation local effects 480 mg/m³ Consumers Short-term inhalation systemic effects 859,7 mg/m³ Consumers Short-term inhalation Local effects 859,7 mg/m³ Consumers Long-term inhalation Systemic effects 102,34 mg/m³ Consumers Long-term inhalation Local effects 102,34 mg/m³

Hydrocarbon, C9 aromatic compound Workers Long-term, dermal Systemic effects 25 mg/kg/bw/day

Workers Long-term oral Systemic effects 150 mg/m³ Consumers Long-term dermal Systemic effects 11 mg/kg/bw/day Consumers Long-term inhalation 32 mg/m³

2-butanone Workers Long-term, inhalation Systemic effects 600 mg/m³ Workers Long-term, dermal Systemic effects 1161 mg/kg/bw/day

Consumers Long-term inhalation systemic effects 106 mg/m³ Consumers Long-term dermal systemic effects 412 mg/kg/bw/day Consumers Long-term oral systemic effects 31 mg/kg/bw/day

Reaction mixture of ethylbenzene, m-xylene and p-xylene Workers Long-term inhalation 221 mg/m³ Workers Short-term inhalation 442 mg/m³ Workers Long-term, Dermal 3182 mg/kg/bw/day Consumers Long-term inhalation 65.3 mg/m³ Consumers Short-term inhalation 260 mg/m³ Consumers Long-term dermal 1872 mg/kg/bw/day Consumers Long-term oral 12.5 mg/kg/bw/day

PNEC = Estimated no-effect concentration. Component data:

Chemical name Mean value

n-butyl acetate fresh water 0,18 mg/l seawater 0,018 mg/l

Periodic releases 0,36 mg/l Cleaning device 35,6 mg/l

Sediment and fresh water 0,981 mg/kg Sediment and seawater 0,098 mg/l Earth 0,09 mg/kg

2-butanone fresh water = 55,8 mg/l seawater = 55,8 mg/l Cleaning device = 709 mg/l

Sediment and fresh water = 284,74 mg/kg dry mass Sediment and seawater = 284,7 mg/kg dry mass Land = 22,5 mg/kg dry mass

reaction mixture of ethylbenzene, m-xylene and p-xylene seawater 0,25 mg/l

Sediment and fresh water 14,33 mg/kg Earth 2,41 mg/kg

8.2. Exposure controls

Respiratory protection: For concentrations above the limit value, the use of face shields lined with type A filters is obligatory. If the oxygen content of the air in the workshop falls below 17 %, an open circular compressed air

suitable for the inlet of compressed air must be used.

Hand protection: for repeated contact with the substance, protective gloves made of nitrile rubber 0,40 mm thick, for contact with droplets (smaller

(minor contact), protective gloves made of nitrile rubber 0,11 mm thick shall be worn.

Eye protection: Wear goggles for lower concentrations in air and full-face protection for higher concentrations.

Skin protection: Under normal conditions, cotton clothing and suitable footwear should be worn. In the case of high spill potential, chemical resistant clothing and footwear should be worn

(PVC, rubber).

9.1 Information on basic physical and chemical properties

(a) External characteristics: Dense liquid

(b) Odour: Characteristic of organic binders.

(c) Odour threshold: Product components with low detection limit for odour.

(d) pH: No data available

(e) Melting point/freezing point: - 78 °C ; Calculation method based on component/component data ; n-butyl acetate

(f) Initial boiling point and boiling range: 80 °C ; Calculation method based on component/component data ; 2- butanone

(g) Flash point: 14 (°C); ISO 3679:2015, closed box ;

(h) Vapour transmission rate: 5,8 (carbon tetrachloride = 1) 2,7 (ether = 1) 1 (n-butyl acetate = 1) ; Calculation method based on component/component data ; n-butyl acetate

(i) Flammability (solid, gaseous): Highly flammable liquid and vapour.

(j) Upper/lower flammability limit or explosion ranges: 1,1

11,5 ; calculation method based on component/ingredient data

(k) Vapour pressure: 13 hPa at 20 °C n-butyl acetate

(l) Vapour density: 4 (air = 1)

2,41 (air = 1) 2-butanone

(m) Relative density: 1,1-1,2 ISO 2811

n) Solubility

Solubility(s): Insoluble

(o) Partition coefficient: n- octanol/water: ; method of calculation based on component/ingredient data

n-butyl acetate (23 °C): 1,81

(p) Self-ignition temperature: 404 °C ; Calculation method based on component/component data ; 2- butanone

(q) Decomposition temperature: No data

r) Viscosity: DIN4 20°C 90 - 110 s

Kinematic viscosity: > 21 mm²/s, 40 °C

s) Explosive properties: The product is not explosive. However, explosive vapour/air mixtures may be generated.

9.2 Other information

Solvent content: (calculated,

%) 48-52

Organic solvents (% tf) 48-52

Water content: (calculated, %) 0,1

10.1 Reactivity

Reactivity: Stable - if used according to instructions.

10.2 Chemical stability

Stability: The product is stable under normal conditions of use and storage.

10.3 Potential for hazardous reactions

Hazardous conditions: Open flame or presence of hazardous substances. Keep product away from heat, sparks, flame and other sources of ignition.

10.4 Conditions to avoid

Conditions to avoid: No data available.

10.5 Non-compatible materials

Incompatibility: The product will not react or mix with most substances except extreme oxidants. Keep in original packaging.

10.6 Hazardous decomposition products:

No data available.

11.1 Information on toxicological effects

(a) Acute toxicity:

ORAL No data known.

DERMAL The product contains ingredients which may cause skin contact symptoms and problems in some individuals. These ingredients are.

; Calculation method based on component/ingredient data using the reaction mixture of ethyl benzene, m-xylene and p-xylene

INHALANCES The product contains ingredients which may be harmful and cause symptoms in sensitive persons if inhaled as vapour, mist or fumes, but their content does not meet the threshold for classification of the product itself. These ingredients are: ; method of calculation for

based on component/ingredient data for the reaction mixture of ethylbenzene, m-xylene and p-xylene

Special precautions: Wash hands thoroughly after use. When using the product, do not eat, drink or smoke.

Ingredient information:

Kemijsko ime LC50 inhalacijska LD50 - oralna LD50 dermalna

n-butyl acetate LC50-4 hours Rat 390 ppm Oral LD50 Rat 14 mg/kg Dermal LD50 Rabbit > 17600 mg/kg

2-butanone LC50-8 hours Rat 23500 mg/m³ Oral LD50 Rat 2483 mg/kg Dermal LD50 Rabbit 5000 mg/kg

(b) Skin corrosion/irritation:

Skin: The product contains ingredients that may be harmful

may be harmful to the skin and may cause pain in sensitive individuals. These ingredients are:

Special precautions: In case of skin irritation: seek medical advice. If contact with skin irritants, seek medical advice. If spilled on skin: Wash with plenty of soapy water.

(c) severe eye damage/eye irritation:

Eye: Causes severe eye irritation.

Special precautions: If eye irritation persists: seek medical attention.

(d) Respiratory or skin sensitisation:

Skin: No data known.

Special precautions: The product does not contain any ingredients that may cause respiratory sensitization or skin sensitization.

(e) Germ cell mutagenicity:

Exposure to product No data known.

Special precautions: The product does not contain any ingredient classified as mutagenic.

(f) Carcinogenicity:

Exposure to the product No data known.

Special precautions: The product does not contain ingredients classified as carcinogens.

(g) Reproductive toxicity:

Exposure to the product No data known.

Special precautions: The product does not contain components classified as toxic for reproduction.

(h) Single-Target Organ Toxicity (STOT):

Exposure may cause respiratory irritation. May cause drowsiness or dizziness.

Special precautions: For use outdoors or in well-ventilated areas only.

(i) repeated exposure after target organ toxicity (STOT):

Exposure to the product The product also contains substances that may be harmful to organs after repeated or prolonged exposure, but their content does not reach the threshold for classification of the product itself.

Special precautions: Product does not contain components classified as causing harmful effect to organs on repeated or prolonged exposure.

(j) Aspiration hazard:

INHALATION The product contains components which may cause aspiration hazard, but due to the sufficiently high kinematic viscosity the product is not classified as an aspiration hazard.

Special precautions: DO NOT induce vomiting.

12.1 Toxicity

Ecotoxicity - ingredient data: Ingredients in the product that are harmful to fish and the aquatic environment.

Chemical name Ecotoxicity conc.

n-butyl acetate EC 50, 48 h: Daphnia = 44 mg/l

LC50 (96 h) for aqueous media *Primephales minnows*, flow test, OECD 203 Test Guidance = 18 mg/l

NOEC: *Desmodesmus subspicatus*, development rate > 200 mg/l

EC 50, 72 h: *Desmodesmus subspicatus*, development rate = 647,7 mg/l IC50_40 *Tetrahymena pyriformis* = 356 mg/l

hydrocarbon, C9 aromatic compound EC 50, 48 h: Daphnia = 3,2 mg/l

LC50 (96 h) for aqueous media fish = 9.2 mg/l

2-butanone LC50 for aqueous media fish > 1000 mg/l LC50 for aqueous media Daphnia > 1000 mg/l

LC50 for aqueous media bacteria > 1000 mg/l

Reaction mixture of ethylbenzene, m-xylene and p-xylene LC 50 (Marine Water), 48 h Crustaceans - Palaemonetes pugio = 8500 µg/l LC 50 (Freshwater), 96 h Oncorhynchus mykiss 3300 - 4093 µg/l EC 50, 48 h: Daphnia 2930 - 4400 µg/l

12.2 Persistence and degradability

Biodegradation: No data available.

12.3. Bioaccumulative potential

Bioconcentration: No data available.

12.4 Mobility in soil

Mobility No data available.

12.5 Results of PBT and vPvB assessment

PBT and vPvB: No data available.

12.6 Other adverse effects

Ecotoxicity - data on ingredients: Based on the classification of the ingredients, the product may have an adverse effect on the environment.

Handling and disposal of residues of the preparation according to the relevant regulation (point 15).

13.1 Waste management methods

Product: Any residues or waste arising from the product and which cannot be used shall be dealt with in accordance with the provisions on the management of special and hazardous waste (Dir. 91/689/EEC, Dir. 2000/532/EC).

EWC code: 08 01 11

Hazardous characteristics of the waste: H3-A

Recommended method of disposal: incineration of residues and waste materials at high temperatures under controlled conditions, or

to a landfill site designated for the storage of hazardous materials.

Packaging: If it is not economically feasible to refurbish and re-use the metal coil, it should be recycled, in particular by the iron and steel industry, or disposed of in a designated landfill (Regulation (EC) No 94/62, Regulation (EC) No 1999/177).

Road/rail transport - ADR/RID: Transport by sea - IMDG: Transport by air (IATA):

14.1 UN No 1263 1263 1263 1263

UN equivalent transport description: PESTICLES PESTICLES PESTICLES

14.3 Class 3 3 3 3

14.4 Packing group: II II II

Hazard label:

Hazard number: 33 33 33 33

Tunnel restriction code (D/E)

Restricted quantity packages: inner: = <5 units, outer: = <30 units

Guide to emergency EmS: F-E, S-E

14.5 Environmental hazards

None

None

None

14.6 Special precautions for the user Transport according to the relevant transport label and transport regulations.

14.7.

II of Marpol/78 and the IBC Code

Bulk transport Not to be used

15.1 Safety, health and environmental requirements/legislation for the substance or mixture concerned

Safety, health and environmental requirements/legislation for the substance or mixture:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18.12.2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its amendments, Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and

amendments, Act XXV of 2000 on Chemical Safety, Decree 44/2000 (XII.27.) of the Ministry of Economic Affairs and Labour on the procedure for dealing with dangerous substances and preparations, Joint Decree 25/2000 (IX.30.) of the Ministry of Economic Affairs and Labour on the (VIII.27.) VM Decree 72/2013 on the register of waste, Act XLXXXV of 2012 on waste.

The product is subject to the Directive on the restriction of volatile organic compounds due to organic solvents in certain activities and equipment, EU 1999-1913 - and the implementation of local legislation.

The product is subject to Directive 96/82/EC (Seveso) due to its hazardous properties and is classified according to this Directive.

Hazard categories (EC) No 1272/2008: P5c FLAMMABLE LIQUIDS

15.2 Chemical safety assessment

Description of H phrases in Chapter 3:

H336 - May cause drowsiness or dizziness. H226 - Flammable liquid and vapour.

H411 - Toxic to aquatic life, causing long-term adverse effects. H335 - May cause respiratory tract irritation.

H304 - May be fatal if swallowed and enters airways. H319 - Causes severe eye irritation.

H225 - Highly flammable liquid and vapour.

H373 - Causes damage to organs through repeated or prolonged exposure. H315 - Irritating to skin.

H312+H332 - Harmful in contact with skin and if inhaled.

Variations: 1-3; 9; 14-16

Original Material Safety Data Sheet manufacturers / suppliers Teri toxicological database.

The safety data sheet has been prepared in accordance with the relevant EU regulations and is believed to comply with Annex II of Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH). Specific data on use are not known. The user decides on the use of this information at his own risk.