



SAFETY DATA SHEET

EC regulation No. 1907/2006 – No. 453/2010 (REACH)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Name: DUROSEAL (product code: PO20, PO21)

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

Construction product. Solvent based curing and protection product for concrete surface.

1.3. Details of the supplier of the safety data sheet

Company name: DUROSTONE Kft.

Address : 2038 Sósút Ipari park, 3508/23, Hungary

Telephone : +36 1 488 00 66

Email : info@durostone.hu

1.4. Emergency telephone number:

Telephone : +36 1 488 00 66, Email : info@durostone.hu

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flam. Liq.3 – H226

Asp. Tox. 1 – H304

STOT SE 3 – H336

STOT RE 1 – H372

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Xn, Harmful – R65, R48/20

R10, R66, R67

Full text of classes H- EUH- and R- phrases: see section 16.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:



Signal Word: DANGER

Hazard statements:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements - Prevention:

P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P260 – Do not breathe vapours/spray.

P271 – Use only outdoors or in a well-ventilated area

P273 – Avoid release to the environment.

P280 – Wear protective gloves/protective clothing/eye protection.

Precautionary statements - Response:

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P314 – Get medical advice/attention if you feel unwell.

P331 – Do NOT induce vomiting.

P370 + P378 – In case of fire: Use Carbon dioxide, Dry chemical powder, Foam (trained personnel only), Sand or earth for extinction.

Precautionary statements - Storage:

P403 + P233 – Store in a well-ventilated place. Keep container tightly closed

P403 + P235 – Store in a well-ventilated place. Keep cool.

Precautionary statements - Disposal:

P501 – Dispose of contents/container at a disposal facility in accordance with local regulations.

Contains: EC 919-446-0 HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols:



Xn Harmful

Risk phrases:

R 10 Flammable.

R48/20 Danger of serious damage to health by prolonged exposure through inhalation.

R 65 Harmful: may cause lung damage if swallowed.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Safety phrases:

S23 Do not breathe gas/fumes/vapour/spray

S24 Avoid contact with skin

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

S46 If swallowed, seek medical advice immediately and show this container or label

S51 Use only in well ventilated area

S43 In case of fire, use foam, dry powder or sand

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

2.3. Other hazards

vPvB Substances : None ; PBT Substance: None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Composition:

Name	ID	Classification		Concentration %
		According to 67/548/EEC	According to 1272/2008/EC (CLP)	
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EC: 919-446-0 REACH reg.: 01-2119458049-33	Xn, R10-48/20-65-66-67	GHS02, GHS07, GHS08 Danger Flam. Liq.3 – H226 Asp. Tox. 1 – H304 STOT SE 3 – H336 STOT RE 1 – H372 EUH 066	50 ≤ x < 100

Hazardous substance content: Benzene: <0.01%, Toluene: <0.1%, n-Hexane: <0.1%

Full text of R-, H- and EUH phrases: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

In the event of exposure by inhalation:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognized cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing:

Do not induce vomiting. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Seek medical attention, showing the label.

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

No data available.

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

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible)..

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurized containers from bursting.

Suitable extinguishing Media: -water mist, halon, foam, multipurpose ABC powder, carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction: water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

5.3. Advice for firefighters

Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under sections 7 and 8.

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Collect spills and put it into appropriated container.

6.4. Reference to other sections

See also section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Do not eat or drink while working. Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention:

Handle in well-ventilated areas.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorized personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep the container tightly closed in a dry, well-ventilated place

Keep away from food and drink, including those for animals.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No relevant data available

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVA (Polyvinyl alcohol)

Recommended properties:

- Impervious gloves in accordance with standard EN374

Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387: - A1 (Brown)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Liquid.

Color: Colorless.

Odour: Naphta odour

pH: Not relevant.

Boiling point: 145-250 °C

Flash Point Interval: 38°C <= PE <= 55°C

Vapor pressure: Below 110 kPa (1.10 bar).

Explosive limits: 0.6 – 6.5 vol %

Relative density: 0.8 – 0.82

Water solubility: Insoluble.

Viscosity: < 7 mm²/s (40°C)

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

10.5. Incompatible materials

Keep away from:

- strong acids
- strong oxidizing agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapors from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Splashes in the eyes may cause irritation and reversible damage

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgment disorder, giddiness, irritability, fatigue or memory disturbance.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.1.1. Substances

Acute toxicity :

HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

Oral route: DL50 > 5000 mg/kg

Species: Rat (recommended by the CLP)

Dermal route: DL50 > 3160 mg/kg

Species: Rat (recommended by the CLP)

Inhalation route: CL50 > 13100 mg/l

Species: Rat (recommended by the CLP)

11.1.2. Mixture

No toxicological data available for the mixture.

Aspiration hazard:

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

SECTION 12: ECOLOGICAL INFORMATION

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

No aquatic toxicity data available for the mixture.

LC50 (fishes 1): >1000 mg/l

EC50 (daphnia): 18 mg/l

12.2. Persistence and degradability

Chemical oxygen demand (COD): 28g O₂/g substance

12.3. Bio accumulative potential

BCF (fishes 1): 4.35 mg/l

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2011 - IMDG 2010 - ICAO/IATA 2012).

14.1. UN number

1993

14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S.

(hydrocarbons, c9-c12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

14.3. Transport hazard class(es)

- Classification:



3

Danger labels – 3 Flammable liquid

Hazard identification number (Kemler No.): - 30

Classification code: F1

Tunnel restriction code: D/E

14.4. Packing group

III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

- Particular provisions:

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Revision:

The safety data sheet has been revised in accordance with the 453/2010/EU regulation. This new version contains classification according to CLP based on datasheet of ingredients. Modifications were made in section 14 regarding the new classification.

Abbreviations:

- ADR/RID: European Agreements on the transport of Dangerous goods by Road/Railway
- IMDG: International agreement on the Maritime transport of Dangerous Goods
- IATA: International Air Transport Association.
- ICAO: International Civil Aviation Organization
- ECHA European Chemicals Agency
- EINECS European Inventory of Existing Commercial chemical Substances
- RID: Regulations concerning the International carriage of Dangerous goods by rail.
- CAS Chemical Abstracts Service
- CLP Classification, labelling and packaging (Regulation (EC) No 1272/2008)
- COPD Chronic Obstructive Pulmonary Disease
- DNEL Derived no effect level
- EPA Efficient Particulate Air filter
- ES Exposure scenario
- EWC European Waste Catalogue
- OELV Occupational exposure limit value
- PBT Persistent, bio-accumulative and toxic
- PNEC Predicted no-effect concentration
- PROC Process category
- RE Repeated exposure
- REACH Registration, Evaluation and Authorisation of Chemicals
- RPE Respiratory protective equipment
- vPvB Very persistent and very Bioaccumulative

Full text of classifications, H, EUH and R phrases mentioned in section 2. and section 3:

Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
STOT RE 1	Specific target organ toxicity — repeated exposure Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H336	May cause drowsiness or dizziness---
H372	Causes damage to organs through prolonged or repeated exposure
EUH066	Repeated exposure may cause skin dryness or cracking.
R 10	Flammable.
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R 65	Harmful: may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.
Xn	Harmful