# Section 1. Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

| | |
|---|---|
| **Product name** | PERCOTOP EP PRIMER ACTIVATOR |
| **Product code** | CS781 |

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

### Identified uses

Hardener for professional use

Based on use descriptor system given by guideline of the European Chemical Agency

| | |
|---|---|
| Sector of use | SU 3, SU 22 |
| Product category | PC9a, PC9b |

Further information see chapter Exposure scenario
The product is only for industrial and/or professional use, not for any private consumer use.

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

### Company/Undertaking Identification

| | |
|---|---|
| Producer/Supplier | Axalta Coating Systems Germany GmbH & Co. KG |
| Street/Box | Horbeller Str. 15 |
| Nat.-Code/Postal code/City | DE 50858 Köln |
| Telephone | +49(0) 2234 6019-01 |

### Information on SDS

| | |
|---|---|
| Responsible Department | Regulatory Affairs |
| Telephone | +49 (0)202 529-2385 |
| Telefax | +49 (0)202 529-2804 |
| E-mail address | sds-competence@axalta.com |

## 1.4. Emergency telephone number

| | |
|---|---|
| Emergency telephone number of manufacturer | +(44)-870-8200418 |

### For further information, please also consult our Internet site

http://www.axaltacoatingsystems.com

# Section 2. Hazards identification

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

## 2.1. Classification of the substance or mixture

### Classification of the mixture

**According to Regulation (EC) No 1272/2008**
Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Corr. 1B, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; STOT SE 3, H335; STOT SE 3, H336; Aquatic Chronic 2, H411;

## 2.2. Label elements

### Labelling according to Regulation (EC) No 1272/2008.

**Pictogram and Signal word of the product**

Signal word: Danger

**Hazardous components which must be listed on the label**

| | |
|---|---|
| Contains | 1-methoxy-2-propanol<br>4-tert-butylphenol<br>m-phenylenebis(methylamine)<br>N,N-dimethyl-1,3-diaminopropane<br>trimethylhexane-1,6-diamine<br>3,6-diazaoctanethylenediamin<br>xylene |

**Hazard statements**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P260 | Do not breathe dust or mist. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |

## 2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Restricted to professional users.

# Section 3. Composition/information on ingredients

## 3.1. Substances

This product is a mixture. Health hazard information is based on its components.

## 3.2. Mixtures

### Chemical characterization

Mixture of synthetic resins and solvents

### Hazardous components

**Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No 1272/2008**

| | | | |
|---|---|---|---|
| CAS 107-98-2<br>EC 203-539-1<br>Classification | 1-methoxy-2-propanol<br>REACh 01-2119457435-35<br>Flam. Liq. 3, H226; STOT SE 3, H336; | 25 - < | 35 % |
| CAS 1330-20-7<br>EC 215-535-7<br>Classification | xylene<br>REACh 01-2119488216-32<br>Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; | 20 - < | 25 % |
| CAS 100-51-6<br>EC 202-859-9<br>Classification | benzyl alcohol<br>REACh 01-2119492630-38<br>Acute Tox. 4, H302; Eye Irrit. 2, H319; Acute Tox. 4, H332; | 7 - < | 10 % |
| CAS 90-72-2<br>EC 202-013-9<br>Classification | 2,4,6-tris(dimethylaminomethyl)phenol<br>REACh 01-2119560597-27<br>Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; | 5 - < | 7 % |
| CAS 100-41-4<br>EC 202-849-4<br>Classification | ethylbenzene<br>REACh 01-2119489370-35<br>Flam. Liq. 2, H225; Asp. Tox. 1, H304; Acute Tox. 4, H332; STOT RE 2, H373; Aquatic Chronic 3, H412; | 5 - < | 7 % |
| CAS 98-54-4<br>EC 202-679-0<br>Classification | 4-tert-butylphenol<br>REACh no registration number available<br>Skin Irrit. 2, H315; Eye Dam. 1, H318; Repr. 2, H361f; Aquatic Chronic 1, H410; SVHC; | 2.5 - < | 3 % |
| CAS 1477-55-0<br>EC 216-032-5<br>Classification | m-phenylenebis(methylamine)<br>REACh 01-2119480150-50<br>Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Acute Tox. 4, H332; Aquatic Chronic 3, H412; | 2.5 - < | 3 % |
| CAS 109-55-7<br>EC 203-680-9<br>Classification | N,N-dimethyl-1,3-diaminopropane<br>REACh 01-2119486842-27<br>Flam. Liq. 3, H226; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Skin Sens. 1, H317; | 1 - < | 2 % |
| CAS 112-24-3<br>EC 203-950-6<br>Classification | 3,6-diazaoctanethylenediamin<br>REACh no registration number available<br>Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; | 1 - < | 2 % |

| | | | |
|---|---|---|---|
| CAS 25620-58-0<br>EC 247-134-8<br>Classification | trimethylhexane-1,6-diamine<br>REACh 01-2119560598-25<br>Acute Tox. 4, H302; Skin Corr. 1C, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; | 0.5 - < | 1 % |
| CAS 108-88-3<br>EC 203-625-9<br>Classification | toluene<br>REACh 01-2119471310-51<br>Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Repr. 2, H361d; STOT RE 2, H373; | 0.1 - < | 0.2 % |

Up to the given revision date of this safety data sheet only the above mentioned REACh registration numbers are assigned to the chemical substances used in this mixture.

**Additional advice**
See full text of H-phrases in chapter 16.

# Section 4. First aid measures

## 4.1. Description of first aid measures

### General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

### Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

### Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

### Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

### Ingestion

If swallowed, seek medical advice immediately and show this safety data sheet (SDS) or product label. Do NOT induce vomiting. Keep at rest.

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

Please see practical experience in section 11.

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

If unconscious place in recovery position and seek medical advice.

# Section 5. Firefighting measures

## 5.1. Extinguishing media

### Suitable extinguishing media

Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical, Water spray.

**Extinguishing media which shall not be used for safety reasons**

High volume water jet

### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products**

Fire will produce dense black smoke containing hazardous combustion products. Exposure to decomposition products may be a hazard to health.

**Hazardous decomposition products**

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

### 5.3. Advice for firefighters

**Fire and Explosion Hazards**

Flammable liquid. Vapours may form explosive mixtures with air. Remove all sources of ignition. Solvent vapours are heavier than air and may spread along floors.

**Special Protective Equipment and Fire Fighting Procedures**

Wear as appropriate: Full protective flameproof clothing. Wear self-contained breathing apparatus for firefighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

## Section 6. Accidental release measures

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

Keep in a well-ventilated place. Keep away from sources of ignition. Do not inhale vapours.

### 6.2. Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems. Please avoid any emission of volatile organic compounds as possible.

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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. Clean preferably with a detergent; avoid use of solvents.

### 6.4. Reference to other sections

Comply with safety directives (see chapters 7 and 8).

## Section 7. Handling and storage

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

### 7.1. Precautions for safe handling

**Safe handling advice**

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8. Comply with the health and safety at work laws. If material is a coating, do not sand, flame cut, braze or weld dry coating without an appropriate respirator or appropriate ventilation, and gloves.

#### Advice on protection against fire and explosion

Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

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

#### Requirements for storage areas and containers

Observe label precautions. Refer to Technical Data Sheet (TDS) for further information about storage temperature. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. The storage and use of this product is subject to the requirements of the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). Up to 50 litres of such highly flammable liquids may be stored in a work area provided they are kept in a fire-proof cupboard or bin. Larger quantities must be kept in a separate storeroom conforming to the structural requirements of the regulations. Further guidance is contained in the HSE ACOP L135, “Storage of Dangerous Substances.”

#### Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

### 7.3. Specific end use(s)

Please see exposure scenarios as given in the annex.

## Section 8. Exposure controls/personal protection

### 8.1. Control parameters

#### DNEL

| CAS-No. | Chemical name | End Use | Exposure routes | Frequency of exposure | Type | Value |
|---|---|---|---|---|---|---|
| 107-98-2 | 1-methoxy-2-propanol | Workers | Dermal | Long term | Systemic effects | 183 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 100 ppm |
| | | Workers | Inhalative | Short term | Local effects | 553.5 mg/m3 |
| 1330-20-7 | xylene | Workers | Dermal | Long term | Systemic effects | 212 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 50.9 ppm |
| 100-51-6 | benzyl alcohol | Workers | Dermal | Long term | Systemic effects | 9.5 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 20.058 ppm |
| 100-41-4 | ethylbenzene | Workers | Dermal | Long term | Systemic effects | 180 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 17.73 ppm |

| CAS-No. | Chemical name | End Use | Exposure routes | Frequency of exposure | Type | Value |
|---|---|---|---|---|---|---|
| 1477-55-0 | m-phenylenebis(methylamine) | Workers | Dermal | Long term | Systemic effects | 0.33 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 0.21 ppm |
| 109-55-7 | N,N-dimethyl-1,3-diaminopropane | Workers | Inhalative | Long term | Systemic effects | 1.156 ppm |
| 108-88-3 | toluene | Workers | Dermal | Long term | Systemic effects | 384 mg/kg/day |
| | | Workers | Inhalative | Long term | Systemic effects | 50.3 ppm |

**PNEC**

| CAS-No. | Chemical name | Compartment | Type | Value |
|---|---|---|---|---|
| 107-98-2 | 1-methoxy-2-propanol | Aquatic | Sediment | 41.6 mg/l |
| | | Aquatic | Fresh water | 10 mg/l |
| | | Aquatic | Sea-water | 1 mg/l |
| 1330-20-7 | xylene | Aquatic | Sediment | 12.46 mg/kg |
| | | Aquatic | Fresh water | 0.327 mg/l |
| | | Aquatic | Sea-water | 0.327 mg/l |
| | | Aquatic | waste-water treatment plant | 6.58 mg/l |
| | | Terrestrial | Soil | 2.31 mg/kg |
| 100-41-4 | ethylbenzene | Aquatic | Sediment | 1.37 mg/kg |
| | | Aquatic | Fresh water | 0.1 mg/l |
| | | Aquatic | Sea-water | 0.01 mg/l |
| | | Aquatic | waste-water treatment plant | 9.6 mg/l |
| | | Terrestrial | Soil | 2.68 mg/kg |
| 108-88-3 | toluene | Aquatic | Sediment | 16.39 mg/l |
| | | Aquatic | Fresh water | 0.68 mg/l |
| | | Aquatic | Sea-water | 0.68 mg/l |
| | | Aquatic | waste-water treatment plant | 13.61 mg/l |
| | | Terrestrial | Soil | 2.89 mg/kg |

**Community / national occupational exposure limits**

| CAS-No. | Chemical name | Source | Time | Type | Value | Note |
|---|---|---|---|---|---|---|
| 107-98-2 | 1-methoxy-2-propanol | | 15 min | IOELV15 | 568 mg/cm3 | Skin |
| | | | 15 min | IOELV15 | 150 ppm | Skin |
| | | | 8 hr | IOELV8 | 375 mg/cm3 | Skin |
| | | | 8 hr | IOELV8 | 100 ppm | Skin |
| | | | | STEL | 560 mg/m3 | |
| | | | | STEL | 150 ppm | |
| | | | | TWA | 375 mg/m3 | |
| | | | | TWA | 100 ppm | |
| 1330-20-7 | xylene | | 15 min | IOELV15 | 442 mg/cm3 | Skin |
| | | | 15 min | IOELV15 | 100 ppm | Skin |
| | | | 8 hr | IOELV8 | 221 mg/cm3 | Skin |
| | | | 8 hr | IOELV8 | 50 ppm | Skin |
| | | | | STEL | 441 mg/m3 | |
| | | | | STEL | 100 ppm | |
| | | | | TWA | 220 mg/m3 | |
| | | | | TWA | 50 ppm | |
| 100-41-4 | ethylbenzene | | 15 min | IOELV15 | 884 mg/cm3 | Skin |
| | | | 15 min | IOELV15 | 200 ppm | Skin |
| | | | 8 hr | IOELV8 | 442 mg/cm3 | Skin |
| | | | 8 hr | IOELV8 | 100 ppm | Skin |
| | | | | STEL | 552 mg/m3 | |
| | | | | STEL | 125 ppm | |
| | | | | TWA | 441 mg/m3 | |
| | | | | TWA | 100 ppm | |

| CAS-No. | Chemical name | Source | Time | Type | Value | Note |
|---|---|---|---|---|---|---|
| 108-88-3 | toluene | | 15 min | IOELV15 | 384 mg/cm3 | Skin |
| | | | 15 min | IOELV15 | 100 ppm | Skin |
| | | | 8 hr | IOELV8 | 192 mg/cm3 | Skin |
| | | | 8 hr | IOELV8 | 50 ppm | Skin |
| | | | | STEL | 384 mg/m3 | |
| | | | | STEL | 100 ppm | |
| | | | | TWA | 191 mg/m3 | |
| | | | | TWA | 50 ppm | |

**Glossary**

IOELV Indicative Occupational Exposure Limit Values
TWA Time weighted average

## 8.2. Exposure controls

### Additional technical information on the plant

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Mask with gas filter, type A (EN 141)

### Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The breakthrough time of gloves is unknown for the product itself. The glove material given is recommended on basis of the substances in the preparation.

| Chemical name | Glove material | Glove thickness | Break through time |
|---|---|---|---|
| xylene | Nitrile rubber | 0.33 mm | 30 MIN |
| | Viton (R) ® | 0.7 mm | 480 MIN |

The protective glove should be checked in each case for their work specific suitability (e.g. mechanical stability, product compatibility, and anti-static properties). When the intended use is for spray application a nitrile glove of the chemical resistance group 3 (e.g. Dermatril® glove) is to be used. After contamination, the glove has to be changed. If immersing the hands into the product is not avoidable (e.g. maintenance work) a butyl or fluorocarbon rubber glove should be used. When skin exposure may occur to materials specified in section 3 of this SDS, advice should be sought from the glove supplier as to appropriate type to use with this product and the permeation breakthrough times. Care should be taken when working with sharp edged articles as these can easily damage the gloves and make them ineffective. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Damaged gloves or those showing signs of wear should be replaced immediately.

### Eye protection

Use safety eyewear designed to protect against splash of products.

### Skin and body protection

Wear suitable protective clothing. Personnel should wear antistatic clothing made of natural fiber or of high temperature resistant synthetic fiber.

### Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

### Environmental exposure controls

Do not let product enter drains.
For ecological information refer to section 12.

# Section 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

### Appearance

**Form:** liquid; **Colour:** clear; **Odour:** Characteristic Paint Odor ;

### Important health, safety and environmental information

| Property | Value | Method |
|---|---|---|
| pH | No data available | |
| Melting point/freezing point | -97 – -48 °C | |
| Boiling point/boiling range | 117 °C | |
| Flash point | 24 °C | EN ISO 3679 |
| Evaporation rate | Slower than Ether | |
| Flammability (solid, gas) | not relevant as product is liquid | |
| Lower explosion limit | 1 vol-% based on organic solvent content | |
| Upper explosion limit | 13.7 vol-% based on organic solvent content | |
| Vapour pressure | 6.5 hPa | |
| Vapour density | No data available | |
| Density | 0.93 $g/cm^3$ | 20 °C - DIN 53217/ISO 2811 |
| Solubility(ies) | | |
| Water solubility | appreciable | |
| Solubility in other solvents | miscible with most organic solvents Listed in: Section 3. Composition/information on ingredients | |
| Partition coefficient: n-octanol/water | This product is a mixture. For ingredient details see section 12 | |
| Auto-ignition temperature | 220 °C | DIN 51794 based on organic solvent content |
| Decomposition temperature | This product is a mixture. For further information see section 10. | |
| Viscosity (23 °C) | <20 s | ISO 2431 - 1993 6 mm |
| Explosive properties | Not explosive | |
| Oxidizing properties | not oxidizing | |

## 9.2. Other information

| | | |
|---|---|---|
| Solvent separation test | < 3% | ADR/RID |
| Content of volatile components (including water) | 67.2 % | Basis Vapour pressure >= 0.01 kPa |
| organic solvent content | 67.2 % | Basis Vapour pressure >= 0.01 kPa |
| European VOC | 67.2 % | Basis Vapour pressure >= 0.1 hPa |

# Section 10. Stability and reactivity

## 10.1. Reactivity

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

## 10.2. Chemical stability

The product is chemically stable.

## 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials to avoid

not required under normal use

### 10.6. Hazardous decomposition products

The product contains ingredients which, under certain conditions, also may release formaldehyde. If necessary, the precise concentration has to be be determined.

## Section 11. Toxicological information

### 11.1. Information on toxicological effects

**General observations**
There is no data available on the product. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1272/2008/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

**Practical experience**
Swallowing may cause nausea, diarrhoea, vomiting, gastro-intestinal irritation and chemical pneumonia. Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

**Acute toxicity**

**Acute inhalation toxicity**

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 216-032-5 | m-phenylenebis(methylamine) | Rat | LC50 | 4 hr | 1.16 mg/l | |
| 202-849-4 | ethylbenzene | Rat | LC50 | 4 hr | 4,000 ppm | |
| 215-535-7 | xylene | Rat | LC50 | 4 hr | 5,000 ppm | |

**Acute dermal toxicity**

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 203-950-6 | 3,6-diazaoctanethylenediamin | Rabbit | LD50 | | 800 mg/kg | |
| 215-535-7 | xylene | Rabbit | LD50 | | > 1,700 mg/kg | |
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | Rat | LD50 | | < 2,000 mg/kg | |
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | Rabbit | LD50 | | 2,139 mg/kg | |

**Acute oral toxicity**

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | Rat | LD50 | | 410 mg/kg | |
| 216-032-5 | m-phenylenebis(methylamine) | Rat | LD50 | | 1,090 mg/kg | |
| 202-013-9 | 2,4,6-tris(dimethylaminomethyl)phenol | Rat | LD50 | | = 1,200 mg/kg | |
| 202-859-9 | benzyl alcohol | Rat | LD50 | | 1,230 mg/kg | |
| 203-950-6 | 3,6-diazaoctanethylenediamin | Mouse | LD50 | | 1,600 mg/kg | |
| 203-950-6 | 3,6-diazaoctanethylenediamin | Rat | LD50 | | 4,340 mg/kg | |
| 203-950-6 | 3,6-diazaoctanethylenediamin | Rabbit | LD50 | | 5,500 mg/kg | |
| 247-134-8 | trimethylhexane-1,6-diamine | | | | ATE 500 | |

### Irritation

#### Eyes

| EINECS-No. | Chemical name | Species | Method | Result |
|---|---|---|---|---|
| 202-013-9 | 2,4,6-tris(dimethylaminomethyl)phenol | | | irritating |
| 215-535-7 | xylene | | | irritating |
| 202-859-9 | benzyl alcohol | | | irritating |

#### Skin

| EINECS-No. | Chemical name | Species | Method | Result |
|---|---|---|---|---|
| 215-535-7 | xylene | | | irritating |
| 202-013-9 | 2,4,6-tris(dimethylaminomethyl)phenol | | | irritating |
| 203-625-9 | toluene | | | irritating |
| 202-679-0 | 4-tert-butylphenol | | | irritating |

### Corrosion

#### Eyes

| EINECS-No. | Chemical name | Species | Method | Result |
|---|---|---|---|---|
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | | | corrosive |
| 203-950-6 | 3,6-diazaoctanethylenediamin | | | corrosive |
| 216-032-5 | m-phenylenebis(methylamine) | | | corrosive |
| 247-134-8 | trimethylhexane-1,6-diamine | | | corrosive |
| 202-679-0 | 4-tert-butylphenol | | | corrosive |

#### Skin

| EINECS-No. | Chemical name | Species | Method | Result |
|---|---|---|---|---|
| 247-134-8 | trimethylhexane-1,6-diamine | | | corrosive |
| 203-950-6 | 3,6-diazaoctanethylenediamin | | | corrosive |
| 216-032-5 | m-phenylenebis(methylamine) | | | corrosive |
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | | | corrosive |

### Sensitisation

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

**Skin sensitisation**

| EINECS-No. | Chemical name | Form | Species | Method | Result |
|---|---|---|---|---|---|
| 203-680-9 | N,N-dimethyl-1,3-diaminopropane | | | | May cause an allergic skin reaction. |
| 203-950-6 | 3,6-diazaoctanethylenediamin | | | | May cause an allergic skin reaction. |
| 216-032-5 | m-phenylenebis(methylamine) | | | | May cause an allergic skin reaction. |
| 247-134-8 | trimethylhexane-1,6-diamine | | | | May cause an allergic skin reaction. |

### Specific target organ toxicity - single exposure

| | |
|---|---|
| EINECS-No. | 215-535-7 |
| Chemical name | xylene |
| Species | |
| Method | |
| Exposure routes | |
| Form | |
| Value | |
| Exposure time | |
| Target Organs | |
| Result | May cause respiratory irritation. |

| | |
|---|---|
| EINECS-No. | 203-625-9 |
| Chemical name | toluene |
| Species | |
| Method | |
| Exposure routes | Inhalation |
| Form | |
| Value | |
| Exposure time | |
| Target Organs | Narcotic effects |
| Result | May cause drowsiness or dizziness. |

| | |
|---|---|
| EINECS-No. | 203-539-1 |
| Chemical name | 1-methoxy-2-propanol |
| Species | |
| Method | |
| Exposure routes | |
| Form | |
| Value | |
| Exposure time | |
| Target Organs | Narcotic effects |
| Result | May cause drowsiness or dizziness. |

### Specific target organ toxicity - repeated exposure

| | |
|---|---|
| EINECS-No. | 203-625-9 |
| Chemical name | toluene |
| Species | |
| Method | |
| Exposure routes | |
| Form | |
| Value | |
| Exposure time | |
| Target Organs | |
| Result | May cause damage to organs through prolonged or repeated exposure. |

| | |
|---|---|
| EINECS-No. | 202-849-4 |
| Chemical name | ethylbenzene |
| Species | |
| Method | |
| Exposure routes | |
| Form | |
| Value | |
| Exposure time | |
| Target Organs | |
| Result | May cause damage to organs through prolonged or repeated exposure. |

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

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

### Reproductive toxicity

| EINECS-No. | Chemical name | Species | Method | Result |
|---|---|---|---|---|
| 203-625-9 | toluene | | | Suspected of damaging fertility or the unborn child. |
| 202-679-0 | 4-tert-butylphenol | | | Suspected of damaging fertility or the unborn child. |

# Section 12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses. The data in this section is consistent with data from chemical safety reports available at the date of revision.

## 12.1. Toxicity

### Aquatic toxicity

#### Acute toxicity aquatic invertebrates

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 216-032-5 | m-phenylenebis(methylamine) | Daphnia | EC50 | 48 h | 35.1 mg/l | |
| 202-679-0 | 4-tert-butylphenol | Daphnia | EC50 | 48 h | 3.9 mg/l | |

#### Acute and extended toxicity of fishes

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 216-032-5 | m-phenylenebis(methylamine) | Oryzias latipes | LC50 | 96 h | 87.6 mg/l | |
| 202-679-0 | 4-tert-butylphenol | Pimephales promelas (fat-head minnow) | LC50 | 96 h | 5.14 mg/l | |

#### Toxicity with aquatic plants

| EINECS-No. | Chemical name | Species | Type | Exposure time | Value | Method |
|---|---|---|---|---|---|---|
| 202-679-0 | 4-tert-butylphenol | Scenedesmus pannonicus | EC50 | 72 h | 11.2 mg/l | |

Contains 0.0% of components with unknown hazards to the aquatic environment.

## 12.2. Persistence and degradability

No information available.

## 12.3. Bioaccumulative potential

No information available.

## 12.4. Mobility in soil

No information available.

## 12.5. Results of PBT and vPvB assessment

Based on available data no ingredient is classified for this hazard property (please see section 3).

## 12.6. Other adverse effects

The preparation has been assessed following the conventional method of the CLP Regulation 1272/2008/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 3 for details.

### Adsorbed organic bound halogens (AOX)

Product does not contain organic linked halogens contributing to AOX.

# Section 13. Disposal considerations

### 13.1. Waste treatment methods

Dispose of in accordance with local regulations.

#### Product

Recommendation:
A disposal process that converts the waste into energy is recommended. If this is not possible the hazardous waste must be disposed of by incineration.

| Waste Key Number | Description |
|---|---|
| 08 01 11 | waste paint and varnish containing organic solvents or other dangerous substances |

#### Uncleaned packaging

Recommendation:
Properly emptied containers are to be scrap processed or reconditioned. Improperly emptied containers are considered hazardous waste (waste key number 150110). Waste, including emptied containers, is controlled waste. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. If fully drained containers are compacted they can be regarded as Controlled Waste and disposed of in accordance with the requirements of the Control of Pollution Act 1974 and the Environmental Protection Act 1990 (GB), the Pollution Control and Local Government (NI) Order 1978 (NI) or of the EC (Waste) Regulations 1979 and the EC (Toxic & Dangerous Waste) Regulations 1982 (IRL).

## Section 14. Transport information

Transport only in accordance with the requirements of the Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labeling), ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

### 14.1. UN number

ADR/RID; IMDG; ICAO/IATA: 3470

### 14.2. UN proper shipping name

ADR/RID; IMDG; ICAO/IATA: PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE

### 14.3. Transport hazard class(es)

#### Hazard class

ADR/RID; IMDG; ICAO/IATA: 8

#### Subsidiary hazard class

ADR/RID; IMDG; ICAO/IATA: 3

#### Labels


#### Tunnel restriction code

ADR/RID: D/E

#### Special Provisions

ADR/RID: No data available

**Kemler Code**

ADR/RID: 83

**Hazchem Code**

ADR/RID: 3WE

**EmS**

IMDG: F-E,S-C

### 14.4. Packaging group

ADR/RID; IMDG; ICAO/IATA: II

### 14.5. Environmental hazards

ADR/RID; IMDG; ICAO/IATA: yes

**Marine pollutant**

IMDG: yes [4-tert-butylphenol]

### 14.6. Special precautions for user

please see section 6 - 8

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

Deliveries shall only be made based on appropriate packaging and in compliance with traffic laws.

## Section 15. Regulatory information

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

**National legislation**

This safety datasheet has been prepared according to British legislation.

The product is labeled according to the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 as amended (CHIP Regulations). The risk associated with the use of this product must be assessed in accordance with the Control of Substances Hazardous to Health (COSHH) Regulations and the Dangerous Substances and Explosive Atmospheres Regulations.

Restricted to professional users.

### 15.2. Chemical safety assessment

No safety checks were carried out on the mixture.

## Section 16. Other information

**Full text of H phrases with no. appearing in section 3**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361d | Suspected of damaging the unborn child. |
| H361f | Suspected of damaging fertility. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| SVHC | Substance of very high concern |

**Information taken from reference works and the literature.**

| | |
|---|---|
| Substance No. | CAS no: http://support.cas.org/content/chemical-substances<br>http://echa.europa.eu/ |
| Substances presenting a health or environmental hazard within the meaning of Directive 67/548/EEC. | http://echa.europa.eu/search-for-chemicals<br>http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database<br>http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB<br>https://www.cdc.gov/niosh/ipcs/ |
| Other directives, limitations and prohibitory regulations | Regulation (EC) No. 1907/2006<br>Directive 98/24/EC<br>Directive 2004/37/EC<br><br>REGULATION (EC) No 1272/2008<br><br>EUR-LEX: http://eur-lex.europa.eu/homepage.html |
| Exposure limit for the pure substance | http://osha.europa.eu/OSHA |

**Training advice**

Regulation (EC) No. 1907/2006
Directive 98/24/EC

**Further information**

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

### Report version

| Version | Changes |
|---|---|
| 32.6 | 11 |

Revision Date: 2019-10-08

# Annex - Exposure scenarios

### Consolidated exposure assessment for industrial and professional use of coating material

The consolidated exposure assessment provides specific information on how a hazardous substance (in a mixture) is to be managed and controlled. It considers specific conditions of use, in order to ensure that a use is safe to humans and the environment. Compliance with operational conditions and risk management measures is required if the exposure assessment is annexed to a mandatory safety data sheet. In this case, identified risk management measures are to be implemented unless the downstream user is able to ensure safe use in a diverging way.

### 1. Consolidated exposure assessment (type 1) for spray application of activators

### Free short title:

Industrial or professional application of activators for 2K spray coating material (professional use in close to industrial setting)

### Systematic title based on use descriptors:

| | |
|---|---|
| Sector of use | SU 22, SU 3 |
| Product category | PC9a, PC9b |
| Process category | PROC4 (covering PROC2), PROC5 (covering PROC3), PROC8a (covering PROC8b), PROC7 or PROC11 |
| Environmental release category | ERC4, ERC5, ERC6d |

### Activities covered:

Preparing (adding activator), transferring/loading, application by spraying, drying and curing of coating material

### Contributing scenarios:

| | |
|---|---|
| spERC x1 | Spray coating including purge loss |
| PROC4 (covering PROC2) | |
| PROC5 (covering PROC3) | Applicable for: Adding of activator |
| PROC8a (covering PROC8b) | Transfer of substance or preparation (charging/discharging) |
| PROC7 | Industrial spraying |
| PROC11 | Non industrial spraying |

### 2. Operational conditions and risk management measures

### 2.1. Contributing environmental scenario

Preparing, transferring/loading, application by spraying, drying and curing of coating material

### Process conditions:

Potential transfer to process waste water stream when using Venturi wet scrubber for collecting overspray

| | M(sperc) | Transfer to process waste water | Release after on-site WWTP | Municipal STP |
|---|---|---|---|---|
| spERC x1 | Solids in paint | 40% | 10% | |
| spERC x1 | Volatiles in paint | 100% | 100% | |

### 2.2. Contributing worker scenarios

Preparing, transferring/loading, application by spraying, drying and curing of coating material

| | PROC | DOA | LEV/TRV | RPE | DPE |
|---|---|---|---|---|---|
| Mixing | 5 (covering 3) | > 4 h | TRV | no | yes level 2 |
| Transferring | 8a (covering 8b) | > 4 h | TRV | no | yes level 2 |
| Non-industrial spraying | 11 | > 4 h | LEV | yes due to aerosol | yes level 2 |
| Industrial spraying | 7 | > 4 h | LEV | yes due to aerosol | yes level 2 |
| Curing | 4 (covering 2) | > 4 h | TRV | no | yes level 2 |

### Further specification:

Above parameters represent standard (default) assumptions according to CEPE mapping of operational conditions Valid information on risk management measures for specific formulation is provided in part 3. Deviation options are explained in part 4 (scaling).

## 3. Exposure estimation and reference to its source

Exposure assessment bases on initial scenarios for the used chemicals in this preparation as provided by manufactuters and importers. Identification of a lead substance indicator per route is based on the DPD+ methodology, taking into account content, dustiness and hazard characteristics. Use of the mixture is considered safe when conditions for safe use of the lead substance indicator are respected. Risk assessment is not applicable as long as no initial exposure scenarios are available.

### 3.1. Environmental assessment

### Assessment method:

ACEA spERC concept

Potential transfer to process waste water stream when using Venturi wet scrubber for collecting overspray

| | LSI (aquatic) | LSI % range | M(sperc) | Transfer to process waste water | Release after on-site WWTP | Release after municipal STP | Dilution factor | Receiving body | PNEC surface water |
|---|---|---|---|---|---|---|---|---|---|
| spERC x1a (solids) | 4-tert-butylphenol | > 1% | – | 40% | 10% | 10% | 5 | 18,000 $m^3$/d | – |
| spERC x1b (solids) | 4-tert-butylphenol | > 1% | – | 70% | 10% | 10% | 5 | 18,000 $m^3$/d | – |

### 3.2. Worker assessment

### Assessment method:

ECETOC TRA version 3.0

Advice on respiratory protection equipment for PROC 7, 11 and on dermal protection equipment is based on Axalta expert judgement Reactive compounds are released in range < 1 % only.
Preparing, transferring/loading, application by spraying, drying and curing of coating material - professional setting

| | PROC | Route | LSI | LSI % range | DOA | LEV / TRV | RPE | DPE | DNEL | RCR |
|---|---|---|---|---|---|---|---|---|---|---|
| Mixing | 5 (covering 3) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.60 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.330000 | 0.83 |
| Transferring | 8a (covering 8b) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.60 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.330000 | 0.83 |
| Non-industrial spraying | 11 | Inhalation | xylene | > 25% | > 4hr | Local exhaust ventilation | Filter mask (90% efficient) | – | 50 | 0.20 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.330000 | 0.13 |

| | PROC | Route | LSI | LSI % range | DOA | LEV / TRV | RPE | DPE | DNEL | RCR |
|---|---|---|---|---|---|---|---|---|---|---|
| Curing | 4 (covering 2) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.30 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.33000 | 0.42 |

Preparing, transferring/loading, application by spraying, drying and curing of coating material - industrial setting

| | PROC | Route | LSI | LSI % range | DOA | LEV / TRV | RPE | DPE | DNEL | RCR |
|---|---|---|---|---|---|---|---|---|---|---|
| Mixing | 5 (covering 3) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.60 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.33000 | 0.83 |
| Transferring | 8a (covering 8b) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.60 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.33000 | 0.83 |
| Industrial spraying | 7 | Inhalation | xylene | > 25% | > 4hr | Local exhaust ventilation | Air-fed mask (95% efficient) | – | 50 | – |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.33000 | 0.13 |
| Curing | 4 (covering 2) | Inhalation | xylene | > 25% | > 4hr | Technical room ventilation | none | – | 50 | 0.30 |
| | | Skin | m-phenylenebis(methylamine) | > 1% | > 4hr | – | – | Resistant gloves, training | 0.33000 | 0.42 |

**Further specification:**

Above exposure assessment is performed for coating material as supplied. Exposure assessment requires adaptation to ready for use mixture (review paint and/or diluant) Hazards of activator compounds are obsolete after film formation of 2K coating

## 4. Guidance to downstream user to evaluate whether he works inside the boundaries set by the exposure scenario

By variation of operational conditions and risk management measures (scaling), a downstream user can check whether he works inside the exposure scenario boundaries.
Standard scaling can be based on exposure modifying factors as used by ECETOC TRA which are listed below.
RCR(s) = RCR(o) * EMF(s)/EMF(o)
RCR(s) shall be $< 1$
RCR(s) = scaled risk characterisation ratio; RCR(o) = original risk characterisation ratio (in part 3)
EMF(s) = exposure modifying factor selected for scaling; EMF(o) = original exposure modyfing factor (in part 3)
Scaling may be used consecutively for multiple determinants.
Example: No technical room ventilation for mixing of tints (EMF(o) = 0.3), duration of activity restricted to 1 h/d (EMF(s) = 0.2)

**Specific scaling may be based on measured values at the individual site.**

| Content % range | Content Factor | DOA h | DOA Factor |
|---|---|---|---|
| > 25 | 1 | > 4 | 1 |
| 5 - 25 | 0.6 | 1 - 4 | 0,6 |
| 1 - 5 | 0.2 | 0,25-1 | 0,2 |
| < 1 | 0.1 | <0,25 | 0,1 |

| Respiratory protection equipment | Factor | |
|---|---|---|
| No RPE | 1 | |
| Filter mask | 0,1 | Level 1 |
| Air-fed mask | 0,05 | Level 2 |

| Skin protection equipment | Factor | |
|---|---|---|
| No gloves | 1 | |
| Suitable gloves | 0,2 | Level 1 |
| Resistant gloves, training | 0,1 | Level 2 |
| Resistant gloves, specific training | 0,05 | Level 3 |

| PROC | Factor for TRV | Factor for LEV Industrial setting | Factor for LEV Professional setting | Factor for LEV Dermal impact |
|---|---|---|---|---|
| 2 | 0.3 | 0.1 | 0.2 | 0.1 |
| 3 | 0.3 | 0.1 | 0.2 | 0.1 |
| 4 | 0.3 | 0.1 | 0.2 | 0.1 |
| 5 | 0.3 | 0.1 | 0.2 | 0.005 |
| 7 | | 0.05 | n.a. | 0.05 |
| 8a | 0.3 | 0.1 | 0.2 | 0.01 |
| 8b | 0.3 | Sol 0.05 | Sol 0.2 | 0.1 |
| 8b | 0.3 | Vol 0.03 | Vol 0.1 | 0.1 |
| 11 | | n.a. | 0.2 | 0.02 |

| PROC | Factor | PROC | Adjusted factor Professional | Adjusted factor Industrial |
|---|---|---|---|---|
| 4 (high volatility) | 1 | 2 (high volatility) | 0.2 | 0.5 |
| 5 (high volatility) | 1 | 3 (high volatility) | 0.2 | 0.4 |
| 8a (high volatility) | 1 | 8b (high volatility) | 0.5 | 0.6 |
| 4 (medium volatility) | 1 | 2 (medium volatility) | 0.4 | 0.5 |
| 5 (medium volatility) | 1 | 3 (medium volatility) | 0.25 | 0.5 |
| 8a (medium volatility) | 1 | 8b (medium volatility) | 0.5 | 1 |
| 4 (low volatility) | 1 | 2 (low volatility) | 0.5 | 0.2 |
| 5 (low volatility) | 1 | 3 (low volatility) | 0.3 | 0.6 |
| 8a (low volatility) | 1 | 8b (low volatility) | 0.4 | 0.5 |

## Additional explanation

Use by private end consumers (SU 21) not considered as product is assigned for professional use only
Wide dispersive use (ERC 8a-8f) not assessed as professional use in paintshops is considered as non dispersive (point source)
No relevant substance transfer expected to marine water, sediment, or soil due to use in dedicated installations.
Environmental assessment only relevant in case of substance transfer into a waste water stream
Environmental assessment based on ACEA sector specific ERC approach (spERC factors for solids and volatiles)
The spERC approach is only applicable to demonstrate safe use of a substance for environmental aspects under REACH.
It is not suitable to demonstrate compliance with applicable local waste water regulations.
Ingestion (oral route) not assessed as not considered to occur in case of industrial / professioonal use
Worker exposure assessment based on DNELs is only applicable to demonstrate safe use of substances under REACH.
It is not suitable to demonstrate compliance with applicable occupational exposure limits (as displayed in section 8 of SDS).
Occupational exposure limits may apply for residual monomers (e.g. formaldehyde, monomeric isocyanates) which are not assessed under REACH.
Exposure assessment is performed for coating material as supplied.
Adaptation may be required for ready for use mixture.
Exposure assessment is performed for application of coating material at ambient temperature.
Adaptation may be required for application at elevated temperature (e.g. hot spraying).
No service life relevance for reactive compounds.
Waste stage not assessed as incineration / biological treatment of waste and safe deposition of inert residues is assumed
Use for coating of toys, articles designed for prolonged skin contact or indirect food contact needs further assessment
No SVHC above declaration threshold contained unless disclosed in section 3 of SDS

## Good practice advice

### Following advice shall be pursued as long as exposure assessment in part 3 does not contain sufficient information

Recommendation to use technical room ventilation.
Advice to wear skin/eye protection as standard RMM due to risk of splashes/droplets.
Advice on respiratory protection equipment for PROC 7, 11 is based on Axalta expert judgement
Advice to use spray-booth or efficient exhaust ventilation.
Advice to wear respiratory protection equipment as standard RMM due to aerosol formation, even in ventilated booth.
Advice to provide spill retention system according to applicable regulation.

### Standardised use descriptors according European Chemical Agency (EChA) Guidance on information requirements and chemical safety assessment, chapter R.12

| | |
|---|---|
| SU 3 | Industrial uses: Uses of substances as such or in preparations at industrial sites |
| SU 22 | Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| PC9a | Coatings and paints, thinners, paint removers |
| PC9b | Fillers, putties, plasters, modelling clay |
| PROC2 | Use in closed, continuous process with occasional controlled exposure |
| PROC3 | Use in closed batch process (synthesis or formulation) |
| PROC4 | Use in batch and other process (synthesis) where opportunity for exposure arises |
| PROC5 | Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/ or significant contact) |
| PROC7 | Industrial spraying |
| PROC8a | Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities |
| PROC8b | Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities |
| PROC11 | Non industrial spraying |
| ERC4 | Industrial use of processing aids in processes and products, not becoming part of articles |
| ERC5 | Industrial use resulting in inclusion into or onto a matrix |
| ERC6d | Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers |

### Glossary

| | |
|---|---|
| SU | Sector of use |
| PC | Product category |
| PROC | Process category |
| ERC | Environmental release category |
| AC | Article category |
| spERC | Sector specific environmental release category (for ACEA uses) |
| ACEA | European automobile manufacturers association |
| CEPE | European council of producers and importers of paints, printing inks and artists' colours |
| OC | Operational condition |
| DOA | Duration of activity |
| LEV | Local exhaust ventilation |
| TRV | Technical room ventilation |
| RMM | Risk Management Measures |
| RPE | Respiratory protection equipment |
| DPE | Dermal protection equipment |
| WWTP | Waste water treatment plant (on-site) |
| STP | Sewage treatment plant (municipal) |
| SVHC | Substance of very high concern |
| LSI | Lead substance indicator |
| M(sperc) | Maximum volume of lead substance which can be used safely under conditions described by CEPE spERC |
| DNEL | Derived No Effect Level |
| DMEL | Derived minimum effect level |
| PNEC | Predicted No Effect Concentration |
| ECETOC TRA | Targeted risk assessment as proposed by European center for ecotoxicology and toxicology of chemicals |
| RCR | Risk characterisation ratio |