

SAFETY DATA SHEET

Date of issue/Date of revision

: 29 February 2024

Version

: 1



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

1.1 Product identifier

Product name : SIGMACOVER 456 BASE ORANGE

Product code : 000001201604

Other means of identification

00476571

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

Product use : Professional applications, Used by spraying.

**Use of the substance/
mixture** : Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

Sigma Paint Saudi Arabia Ltd.
PO Box 7509, Dammam 31472
Saudi Arabia
Tel: 00966 138 47 31 00
Fax: 00966 138 47 17 34

**e-mail address of person
responsible for this SDS** : PS.ACEMEA@ppg.com

**1.4 Emergency telephone
number** : 00966 138473100 extn 1001

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

Code : 000001201604

Date of issue/Date of revision : 29 February 2024

SIGMACOVER 456 BASE ORANGE

SECTION 2: Hazards identification

Hazard statements

Precautionary statements

Prevention

Response

Storage

Disposal

Hazardous ingredients

Supplemental label elements

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Special packaging requirements

Containers to be fitted with child-resistant fastenings

Tactile warning of danger

: Warning

: Flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful to aquatic life with long lasting effects.

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapour.

: Take off contaminated clothing and wash it before reuse.

: Not applicable.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.
P280, P210, P273, P261, P362 + P364, P501

: epoxy resin (MW ≤ 700)
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine

: Contains epoxy constituents. May produce an allergic reaction.

: Not applicable.

: Not applicable.

: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB

Other hazards which do not result in classification

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|-------------------------|---------------------------------|-----------|---|---|---------|
| xylene | EC: 215-535-7 CAS: 1330-20-7 | ≥10 - ≤18 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 | ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |

English (GB)

Saudi Arabia

2/14

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 3: Composition/information on ingredients

| | | | | | |
|--|---|-------------|---|---|---------|
| epoxy resin (MW ≤ 700) | REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 | ≥5.0 - ≤10 | Aquatic Chronic 3, H412 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5% | [1] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥1.0 - ≤5.0 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | ATE [Inhalation (vapours)] = 17.8 mg/l | [1] [2] |
| 2-methylpropan-1-ol | REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1 | ≤1.0 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 | - | [1] [2] |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0 | ≤0.30 | Skin Sens. 1B, H317 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | - | [1] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|----------------------------|---|
| Eye contact | : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. |
| Inhalation | : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. |
| Skin contact | : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. |
| Ingestion | : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting. |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

| | |
|--------------|---|
| Eye contact | : Causes serious eye irritation. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |

Code : 000001201604

Date of issue/Date of revision

: 29 February 2024

SIGMACOVER 456 BASE ORANGE

SECTION 4: First aid measures

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Code : 000001201604

Date of issue/Date of revision

: 29 February 2024

SIGMACOVER 456 BASE ORANGE

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)
See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|--|
| xylene | EU OEL (Europe, 1/2022). [xylene, mixed isomers pure] Absorbed through skin. STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours. |
| ethylbenzene | EU OEL (Europe, 1/2022). Absorbed through skin. STEL: 884 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 442 mg/m³ 8 hours. TWA: 100 ppm 8 hours. |
| 2-methylpropan-1-ol | ACGIH TLV (United States, 1/2023). TWA: 152 mg/m³ 8 hours. TWA: 50 ppm 8 hours. |

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Code : 000001201604 **Date of issue/Date of revision** : 29 February 2024
SIGMACOVER 456 BASE ORANGE

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Gloves** : butyl rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** :
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Orange.
- Odour** : Aromatic. [Strong]
- Odour threshold** : Not available.
- Melting point/freezing point** : May start to solidify at the following temperature: -94.9°C (-138.8°F) This is based on data for the following ingredient: ethylbenzene. Weighted average: -95.14°C (-139.3°F)
- Initial boiling point and boiling range** : >37.78°C
- Flammability** : Not available.
- Upper/lower flammability or explosive limits** : Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)
- Flash point** : Closed cup: 27°C

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 9: Physical and chemical properties

Auto-ignition temperature

:

| Ingredient name | °C | °F | Method |
|--|-----|-----|----------|
| 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxobutyramide | 180 | 356 | VDI 2263 |

Decomposition temperature

:

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

pH

:

Not applicable.

Viscosity

:

Kinematic (room temperature): >400 mm²/s

Kinematic (40°C): >21 mm²/s

Viscosity

:

60 - 100 s (ISO 6mm)

Solubility(ies)

:

| Media | Result |
|------------|-------------|
| cold water | Not soluble |

Partition coefficient: n-octanol/ water

:

Not applicable.

Vapour pressure

:

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|---------------------|-------------------------|------|----------------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| 2-methylpropan-1-ol | <12.00102 | <1.6 | DIN EN 13016-2 | | | |

Evaporation rate

:

Highest known value: 0.84 (ethylbenzene) Weighted average: 0.77compared with butyl acetate

Relative density

:

1.34

Vapour density

:

Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.65 (Air = 1)

Explosive properties

:

The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

Oxidising properties

:

Product does not present an oxidizing hazard.

Particle characteristics

:

Median particle size

:

Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | | |
|---|---|---|
| 10.1 Reactivity | : | No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : | The product is stable. |
| 10.3 Possibility of hazardous reactions | : | Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : | When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8. |
| 10.5 Incompatible materials | : | Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |
| 10.6 Hazardous decomposition products | : | Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides |

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|-------------|----------|
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| epoxy resin (MW ≤ 700) | LD50 Dermal | Rabbit | >2 g/kg | - |
| | LD50 Oral | Rat | >2 g/kg | - |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 17.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | - |
| 2-methylpropan-1-ol | LC50 Inhalation Vapour | Rat | 24.6 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 2460 mg/kg | - |
| | LD50 Oral | Rat | 2830 mg/kg | - |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | LC50 Inhalation Dusts and mists | Rat | 5.05 mg/l | 4 hours |
| | LD50 Oral | Rat | >2000 mg/kg | - |

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| epoxy resin (MW ≤ 700) | Eyes - Mild irritant | Rabbit | - | - | - |
| | Skin - Mild irritant | Rabbit | - | - | - |

Conclusion/Summary

Skin : There are no data available on the mixture itself.
Eyes : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|------------|-------------|
| epoxy resin (MW ≤ 700) | skin | Mouse | Sensitising |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | skin | Guinea pig | Sensitising |

Conclusion/Summary

Skin : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|----------|-------------------|---------------|
| | | | |

Information on likely routes of exposure : Not available.

Potential acute health effects

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 11: Toxicological information

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.
- Other information** : Not available.

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

| | |
|----------------------------|--|
| Code : 000001201604 | Date of issue/Date of revision : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | |

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|---------------------------------|--|----------|
| epoxy resin (MW ≤ 700) | Acute LC50 1.8 mg/l | Daphnia | 48 hours |
| ethylbenzene | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - <i>Ceriodaphnia dubia</i> | - |
| 2-methylpropan-1-ol | Acute EC50 1100 mg/l | Daphnia | 48 hours |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Acute EC50 >100 mg/l | Algae - <i>Pseudokirchneriella subcapitata</i> | 72 hours |
| | Acute EC50 >10 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 >10 mg/l | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |

Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|--|--------------------------|------|----------|
| epoxy resin (MW ≤ 700) | OECD 301F | 5 % - 28 days | - | - |
| ethylbenzene | - | 79 % - Readily - 10 days | - | - |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 301D Ready Biodegradability - Closed Bottle Test | 22 % - 28 days | - | - |

Conclusion/Summary : There are no data available on the mixture itself.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| xylene | - | - | Readily |
| epoxy resin (MW ≤ 700) | - | - | Not readily |
| ethylbenzene | - | - | Readily |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | - | - | Inherent |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-------------|-----------|
| xylene | 3.12 | 7.4 to 18.5 | Low |
| epoxy resin (MW ≤ 700) | 3 | 31 | Low |
| ethylbenzene | 3.6 | 79.43 | Low |
| 2-methylpropan-1-ol | 1 | - | Low |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | >5.86 | - | High |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 12: Ecological information

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

| Type of packaging | European waste catalogue (EWC) |
|-------------------|--------------------------------|
| Container | 15 01 06 mixed packaging |

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|---------------------------------|---------|--------|--------|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. |

Code : 000001201604 **Date of issue/Date of revision** : 29 February 2024
SIGMACOVER 456 BASE ORANGE

SECTION 14: Transport information

| | | | |
|------------------------------------|-----------------|-----------------|-----------------|
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |
|------------------------------------|-----------------|-----------------|-----------------|

Additional information

ADR/RID : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.
Tunnel code : (D/E)
IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
IATA : None identified.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other national and international regulations.

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements

| | | | |
|----------------------------|----------------|--------------------------------|--------------------|
| Code | : 000001201604 | Date of issue/Date of revision | : 29 February 2024 |
| SIGMACOVER 456 BASE ORANGE | | | |

SECTION 16: Other information

| | | |
|---|-------------------|--|
| | : H225 | Highly flammable liquid and vapour. |
| | H226 | Flammable liquid and vapour. |
| | H304 | May be fatal if swallowed and enters airways. |
| | H312 | Harmful in contact with skin. |
| | 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. |
| | H373 | May cause damage to organs through prolonged or repeated exposure. |
| | H411 | Toxic to aquatic life with long lasting effects. |
| | H412 | Harmful to aquatic life with long lasting effects. |
| Full text of classifications [CLP/GHS] | : Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| | Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| | Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| | Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| | Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| | Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| | Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| | Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| | Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| | Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| | Skin Sens. 1B | SKIN SENSITISATION - Category 1B |
| | STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| | STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |
| | | |

History

| | |
|---------------------------------|--------------------------|
| Date of issue/ Date of revision | : 29 February 2024 |
| Date of previous issue | : No previous validation |
| Prepared by | : EHS |
| Version | : 1 |

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.