

SAFETY DATA SHEET

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

1.1 Product identifier

Product name : Magnalux 41V2 Vinyl Ester Glass Flake - Catalyst

Product code : 41V2A

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

Material uses : Paint or paint related material.

: Industrial use only.

1.3 Details of the supplier of the safety data sheet

Sherwin-Williams UK Limited - Protective & Marine
Coatings Division EMEA
Tower Works
Kestor Street
Bolton
BL2 2AL
United Kingdom
+44 (0) 1204 521771

The Sherwin-Williams Company
Inver France SAS
2 Rue Jean Revaus - BP 80088 - 79102
Thouars CEDEX
France

e-mail address of person responsible for this SDS : hse.pm.emea@sherwin.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : +45 82 12 12 12

Supplier

Telephone number : +(44)-870-8200 418

Hours of operation : Emergency contact available 24 hours a day

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]

Org. Perox. D, H242
Acute Tox. 4, H302
Acute Tox. 3, H331
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Carc. 1B, H350
STOT SE 3, H335

SECTION 2: Hazards identification

STOT RE 2, H373

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



Signal word

: Danger

Hazard statements

: Heating may cause a fire.
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Toxic if inhaled.
May cause respiratory irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep only in original packaging. Do not breathe vapor.

Response

: IF exposed or concerned: Get medical advice or attention.

Storage

: Not applicable.

Disposal

: Not applicable.

Hazardous ingredients

: α , α -dimethylbenzyl hydroperoxide
2-Butanone, peroxide
cumene

Supplemental label elements

: FOR INDUSTRIAL USE ONLY

Special packaging requirements

Not applicable.

2.3 Other hazards

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

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|--|-----------|---|---|---------|
| Diisononyl Phthalate | REACH #: 01-2119430798-28 EC: 249-079-5 CAS: 28553-12-0 | ≥25 - ≤50 | Not classified. | - | [2] |
| Cumene Hydroperoxide | EC: 201-254-7 CAS: 80-15-9 Index: 617-002-00-8 | ≥10 - ≤20 | Org. Perox. E, H242 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411 | ATE [Oral] = 382 mg/kg ATE [Dermal] = 500 mg/kg ATE [Inhalation (gases)] = 220 ppm Skin Corr. 1B, H314: C ≥ 10% Skin Irrit. 2, H315: 3% ≤ C < 10% Eye Dam. 1, H318: C ≥ 3% Eye Irrit. 2, H319: 1% ≤ C < 3% STOT SE 3, H335: C ≥ 1% | [1] |
| Methyl Ethyl Ketone Peroxide | REACH #: 01-2119514691-43 EC: 215-661-2 CAS: 1338-23-4 Index: ID670 | ≥10 - ≤25 | Org. Perox. D, H242 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 | ATE [Oral] = 1017 mg/kg | [1] [2] |
| t-Butyl perbenzoate | REACH #: 01-2119513317-46 EC: 210-382-2 CAS: 614-45-9 | ≤10 | Org. Perox. C, H242 Acute Tox. 4, H332 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 | ATE [Inhalation (vapours)] = 11 mg/l M [Acute] = 1 | [1] |
| Methyl Ethyl Ketone | REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3 | ≤10 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | - | [1] [2] |
| Cumene | EC: 202-704-5 CAS: 98-82-8 Index: 601-024-00-X | ≤4.5 | Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 | - | [1] [2] |
| 1-Ethyl-2-Pyrrolidinone | REACH #: 01-2119472138-36 EC: 220-250-6 CAS: 2687-91-4 Index: 616-208-00-5 | <0.3 | Eye Dam. 1, H318 Repr. 1B, H360Df | - | [1] |
| See Section 16 for the full text of the H statements declared above. | | | | | |

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.

Type

SECTION 3: Composition/information on ingredients

[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

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- 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 recognized skin cleanser. Do NOT use solvents or thinners. Wash clothing before reuse.
- Ingestion** : If swallowed, seek medical advice immediately and show this 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations 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 the kidneys, 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 mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray or mist.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : Fire will produce dense black smoke. CAUTION: May re-ignite itself after fire is extinguished. Material supports combustion. In case of fire and/or explosion do not breathe fumes. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
- Keep unnecessary and unprotected personnel from entering.
- For emergency responders** : If specialized 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

- : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

- : 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 (see Section 13). The waste should NOT be confined. Preferably clean with a detergent. Avoid using solvents.

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

- : Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

SECTION 7: Handling and storage

Do not allow to enter drains or watercourses.

Avoid confinement. Do not allow to dry out. Avoid shock and friction. Explosive when dry.

Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Use explosion-proof electrical (ventilating and lighting) equipment.

7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

Notes on joint storage

Keep away from reducing agents, heavy metal compounds and alkaline and acidic materials.

Additional information on storage conditions

Observe label precautions. Do not store above the following temperature: 25°C (77°F). Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep only in the original container.

Contaminated absorbent material may pose the same hazard as the spilled product.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

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 |
|------------------------------|---|
| Diisononyl Phthalate | Working Environment Authority (Denmark, 6/2022). TWA: 3 mg/m ³ 8 hours. STEL: 6 mg/m ³ 15 minutes. |
| Methyl Ethyl Ketone Peroxide | Working Environment Authority (Denmark, 6/2022). CEIL: 1 mg/m ³ |
| Methyl Ethyl Ketone | Working Environment Authority (Denmark, 6/2022). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 145 mg/m ³ 8 hours. STEL: 900 mg/m ³ 15 minutes. STEL: 300 ppm 15 minutes. |
| Cumene | Working Environment Authority (Denmark, 6/2022). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours. STEL: 250 mg/m ³ 15 minutes. |

SECTION 8: Exposure controls/personal protection

STEL: 50 ppm 15 minutes.

Biological exposure indices

No exposure indices known.

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.
- : Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|------------------------------|------|----------------------|------------------------|--------------------------------|----------|
| Methyl Ethyl Ketone Peroxide | DNEL | Long term Dermal | 1.33 mg/kg | Workers | Systemic |
| | DNEL | Long term Inhalation | 2.35 mg/m ³ | Workers | Systemic |
| Methyl Ethyl Ketone | DNEL | Long term Dermal | 1161 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 600 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 412 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Inhalation | 106 mg/m ³ | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 31 mg/kg bw/day | General population [Consumers] | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|------------------------------|------------------------|------------------------|---------------|
| Methyl Ethyl Ketone Peroxide | Fresh water | 0.005 mg/l | - |
| | Marine water | 0.05 mg/m ³ | - |
| | Fresh water sediment | 0.087 mg/kg | - |
| | Marine water sediment | 0.072 mg/kg | - |
| | Soil | 0.014 mg/kg | - |
| | Sewage Treatment Plant | 1.2 mg/l | - |
| Methyl Ethyl Ketone | Fresh water | 55.8 mg/l | - |
| | Marine water | 55.8 mg/l | - |
| | Sewage Treatment Plant | 709 mg/l | - |
| | Sediment | 284.7 mg/kg dwt | - |
| | Soil | 22.5 mg/kg | - |
| | Secondary Poisoning | 1000 mg/kg | - |

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

- Appropriate engineering controls** :
- Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. Use explosion-proof ventilation equipment.
 - Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Individual protection measures

- 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** :
- Use safety eyewear designed to protect against splash of liquids.

Skin protection

Hand protection

Gloves

- Wear suitable gloves tested to EN374.
- Gloves for short term exposure/splash protection (less than 10 min): Nitrile >0.12 mm
Gloves for splash protection need to be changed immediately when in contact with chemicals.
For long term exposure or spills (breakthrough time >480 min): Use PE laminate gloves as under gloves.
Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
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.

- Body protection** :
- Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers. Wash clothing before reuse.
 - 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.

- 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** :
- Application methods:
Brush or roller. Approved/certified respirator with organic vapor cartridge. Filter type: A2 P2 (EN14387).
Manual spraying. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

- Environmental exposure controls** :
- Do not allow to enter drains or watercourses.

SECTION 8: Exposure controls/personal protection

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

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. |
| Color | : Colorless. |
| Odor | : None |
| Odor threshold | : Not available. |
| pH | : Not relevant/applicable due to nature of the product. insoluble in water. |
| Melting point/freezing point | : Not relevant/applicable due to nature of the product. |
| Initial boiling point and boiling range | : 260°C |
| Flash point | : Closed cup: 94°C [Pensky-Martens Closed Cup] |
| Evaporation rate | : Not relevant/applicable due to nature of the product. |
| Flammability | : Not relevant/applicable due to nature of the product. |
| Lower and upper explosion limit | : LEL: 0.3% (Diisononyl Phthalate) UEL: 10% (Methyl Ethyl Ketone) |
| Vapor pressure | : Not relevant/applicable due to nature of the product. |
| Relative vapor density | : Not relevant/applicable due to nature of the product. |
| Relative density | : 1.09 |
| Solubility(ies) | : |

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

Partition coefficient: n-octanol/ water : Not relevant/applicable due to nature of the product.

Auto-ignition temperature :

| Ingredient name | °C | °F | Method |
|------------------------|-----------|-----------|---------------|
| Cumene | 425 | 797 | |
| Methyl Ethyl Ketone | 475 | 887 | |

Decomposition temperature : Not relevant/applicable due to nature of the product.

Viscosity : Kinematic (40°C): >20.5 mm²/s

Explosive properties : Under normal conditions of storage and use, hazardous reactions will not occur.

Oxidizing properties : Under normal conditions of storage and use, hazardous reactions will not occur.

Particle characteristics

Median particle size : Not relevant/applicable due to nature of the product.

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 : Hazardous reactions or instability may occur under certain conditions of storage or use.

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.
SADT (Self-Accelerating Decomposition Temperature) is the lowest temperature at which self-accelerating decomposition may occur with a substance in the packaging as used for transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at or above the SADT. Contact with incompatible substances can cause decomposition at or below the SADT.
Avoid shock and friction.

10.5 Incompatible materials : Keep away from rust, iron and copper. Contact with incompatible materials, such as acids, alkalis, heavy metal compounds and reducing agents, will result in hazardous decomposition. Do not mix with peroxide accelerators.

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations 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 the kidneys, 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 mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|-----------------------|---------|------------------------|----------|
| Cumene Hydroperoxide | LC50 Inhalation Gas. | Rat | 220 ppm | 4 hours |
| | LD50 Dermal | Rat | 500 mg/kg | - |
| | LD50 Oral | Rat | 382 mg/kg | - |
| Methyl Ethyl Ketone Peroxide | LC50 Inhalation Gas. | Rat | 200 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 3600 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | 1017 mg/kg | - |
| t-Butyl perbenzoate | LD50 Oral | Rat | 1012 mg/kg | - |

SECTION 11: Toxicological information

| | | | | |
|-------------------------|-----------------------|--------|-------------------------|---------|
| Methyl Ethyl Ketone | LD50 Dermal | Rabbit | 6480 mg/kg | - |
| | LD50 Oral | Rat | 2737 mg/kg | - |
| Cumene | LC50 Inhalation Vapor | Rat | 39000 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | 1400 mg/kg | - |
| 1-Ethyl-2-Pyrrolidinone | LD50 Oral | Rat | 1350 mg/kg | - |

Acute toxicity estimates

| Route | ATE value |
|---------------------|---------------|
| Oral | 1388.47 mg/kg |
| Dermal | 2500 mg/kg |
| Inhalation (gases) | 1100 ppm |
| Inhalation (vapors) | 111.68 mg/l |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|--------------------------|---------|-------|--------------------|-------------|
| Cumene Hydroperoxide t-Butyl perbenzoate | Skin - Mild irritant | Rabbit | - | 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 1 minutes | - |
| | | | | 100 mg | |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 4 hours 0.1 MI | - |
| Methyl Ethyl Ketone | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 120 hours 0.1 MI I | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Cumene | Eyes - Mild irritant | Rabbit | - | 86 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 10 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |
| | | | | | |
| 1-Ethyl-2-Pyrrolidinone | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |

Conclusion/Summary : Not available.

Sensitization

No data available

Conclusion/Summary : Not available.

Mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

SECTION 11: Toxicological information

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| Cumene Hydroperoxide | Category 3 | - | Respiratory tract irritation |
| Methyl Ethyl Ketone | Category 3 | - | Narcotic effects |
| Cumene | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|---------------|
| Cumene Hydroperoxide | Category 2 | - | - |

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| Cumene | ASPIRATION HAZARD - Category 1 |

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---|---|----------------------|
| Cumene Hydroperoxide | Acute LC50 12.7 mg/l Fresh water | Fish - <i>Pimephales promelas</i> - Larvae | 96 hours |
| Methyl Ethyl Ketone | Acute EC50 >500000 µg/l Marine water Acute EC50 5091000 µg/l Fresh water | Algae - <i>Skeletonema costatum</i> Daphnia - <i>Daphnia magna</i> - Larvae | 96 hours 48 hours |
| Cumene | Acute LC50 3220000 µg/l Fresh water Acute EC50 7.4 mg/l Marine water | Fish - <i>Pimephales promelas</i> Crustaceans - <i>Artemia</i> sp. - Nauplii | 96 hours 48 hours |
| | Acute EC50 10.6 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Acute LC50 2700 µg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|------|--------|------|----------|
| No data available | | | | |

Conclusion/Summary : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Methyl Ethyl Ketone | - | - | Readily |

SECTION 12: Ecological information

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-------|-----------|
| Cumene Hydroperoxide | - | 9 | Low |
| Cumene | - | 35.48 | Low |

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.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized 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 : Yes.

European waste catalogue (EWC) : waste paint and varnish containing organic solvents or other hazardous substances 08 01 11*

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

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




Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

European waste catalogue (EWC) : packaging containing residues of or contaminated by hazardous substances 15 01 10*

SECTION 13: Disposal considerations

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. Avoid dispersal of spilled 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 | UN3105 | UN3105 | UN3105 |
| 14.2 UN proper shipping name | ORGANIC PEROXIDE TYPE D, LIQUID (Methyl Ethyl Ketone Peroxide) | ORGANIC PEROXIDE TYPE D, LIQUID (Methyl Ethyl Ketone Peroxide) | ORGANIC PEROXIDE TYPE D, LIQUID (Methyl Ethyl Ketone Peroxide) |
| 14.3 Transport Hazard Class(es)/ Label(s) | 5.2  | 5.2  | 5.2  |
| 14.4 Packing group | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. |
| Additional information | <u>Tunnel code</u> D | <u>Emergency schedules</u> F-J, S-R | - |

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 Maritime transport in bulk according to IMO instruments : Not applicable.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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 authorization

Annex XIV

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

SECTION 15: Regulatory information

| Product/ingredient name | % | Designation [Usage] |
|--|-----------|---------------------|
| Magnalux 41V2 Vinyl Ester Glass Flake - Catalyst | ≥90 | 3 |
| di-"isononyl" phthalate | ≥25 - ≤50 | 28 |
| cumene | ≤4.5 | 52 |
| | | 28 |

Labeling : Restricted to professional users.

Other EU regulations

VOC content (2010/75/EU) : 20.4 w/w
223 g/l

Explosive precursors : Not applicable.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Danish fire class : III-1

Executive Order No. 1795/2015

| Ingredient name | Annex I Section A | Annex I Section B |
|-----------------|-------------------|-------------------|
| cumene | - | Carc. 1B, H350 |

MAL-code 93 : 5-4

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, respiratory protection with air supply and arm protectors/apron/coveralls/protective clothing must be worn as appropriate or as instructed.

MAL-code: 5-4

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

During non-atomizing spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in existing* spray booths, if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin. During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and protective clothing must be worn.

SECTION 15: Regulatory information

When spraying in new* booths if the operator is outside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

Low-boiling liquids : This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

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]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative
N/A = Not available

Key literature references and sources for data : Regulation (EC) No. 1272/2008 [CLP]
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878
Directive 2012/18/EU, and relative amendments & additions
Directive 2008/98/EC, and relative amendments & additions
Directive 2009/161/EU, and relative amendments & additions
CEPE Guidelines

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SECTION 16: Other information

| Classification | Justification |
|---|---|
| Org. Perox. D, H242 Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412 | Expert judgment Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method |

| | | |
|--|--|--|
| Full text of abbreviated H statements | : H225 H226 H242 H302 H304 H311 H314 H315 H317 H318 H319 H330 H331 H332 H335 H336 H350 H360Df H373 H400 H411 H412 EUH066 | Highly flammable liquid and vapor. Flammable liquid and vapor. Heating may cause a fire. Harmful if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Fatal if inhaled. Toxic if inhaled. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. May damage the unborn child. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking. |
|--|--|--|

| | | |
|---|---|--|
| Full text of classifications [CLP/GHS] | : Acute Tox. 2 Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Carc. 1B Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Org. Perox. C Org. Perox. D Org. Perox. E Repr. 1B Skin Corr. 1B Skin Irrit. 2 Skin Sens. 1 STOT RE 2 STOT SE 3 | ACUTE TOXICITY - Category 2 ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 ORGANIC PEROXIDES - Type C ORGANIC PEROXIDES - Type D ORGANIC PEROXIDES - Type E TOXIC TO REPRODUCTION - Category 1B SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |
|---|---|--|

SECTION 16: Other information

Date of printing : 22, Sep, 2023.

Date of issue/ Date of revision : 22, Sep, 2023

Date of previous issue : 15, Jun, 2023

: If there is no previous validation date please contact your supplier for more information.

Version : 9

Notice to reader

In accordance with Regulation (EC) 1907/2006, REACH Regulation, Articles 31, 37, any required hazard-related information on the use of substances received as downstream user will be sent forward. Consequently, the safety data sheets for some products will contain a SUMI - Safe Use of Mixture Information - attached to the safety data sheet.

SUMI(s) will be added to the SDS for products if both the following conditions are met:

- The product is classified as hazardous for health***
- The product contains one or more REACH-registered substances for which extended safety data sheets (exposure scenarios) have been provided***

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.