

# SAFETY DATA SHEET

FRS-40 GLOSS BASE VARNISH

### Section 1. Identification

GHS product identifier SDS code

: FRS-40 GLOSS BASE VARNISH : 21040000B

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

| Identified uses   |   |  |
|---|---|--|
| Paint. Professional use Industrial use  |   |  |
| Uses advised against  |   |  |
| All other uses  |   |  |
| Product use   | : Solvent borne coating for interior use.   |  |
| Supplier's details<br>MAPAERO SAS<br>10, Avenue de la Rijo<br>09103 PAMIERS Cer<br>France |   |  |
| Emergency telephone<br>number (with hours of<br>operation)                                | : CHEMTREC +1 (800) 424-9300 (Inside the US)<br>CHEMTREC International +1 (703) 527-3887 (Outside the US, collect calls accepted)   |  |
| Section 2. Hazards  | Section 2. Hazards identification   |  |
| OSHA/HCS status   | : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).   |  |
| Classification of the substance or mixture  | <ul> <li>FLAMMABLE LIQUIDS - Category 3<br/>SKIN SENSITIZATION - Category 1<br/>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -<br/>Category 3<br/>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</li> </ul> |  |
| GHS label elements  |   |  |
| Hazard pictograms   |   |  |
| Signal word   | : Warning   |  |
| Hazard statements   | <ul> <li>Fammable liquid and vapor.</li> <li>May cause an allergic skin reaction.</li> <li>May cause drowsiness or dizziness.</li> <li>May cause damage to organs through prolonged or repeated exposure. (hearing organs)</li> </ul>               |  |
| Precautionary statements  |   |  |

### Section 2. Hazards identification

| Prevention                          | : Wear protective gloves. Keep away from heat, sparks and hot surfaces. No smoking.<br>Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools.<br>Take action to prevent static discharges. Do not breathe vapor.                     |
|-------------------------------------|--|
| Response                            | : Set medical advice or attention if you feel unwell. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. |
| Storage                             | : Store in a well-ventilated place. Keep container tightly closed. Keep cool.  |
| Disposal                            | : Dispose of contents and container in accordance with all local, regional, national and international regulations.  |
| Hazards not otherwise<br>classified | : None known.  |

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

| Ingredient name                 | %         | CAS number |
|---------------------------------|-----------|------------|
| n-butyl acetate                 | ≥25 - ≤50 | 123-86-4   |
| 2-methoxy-1-methylethyl acetate | ≥10 - ≤25 | 108-65-6   |
| xylene                          | <10       | 1330-20-7  |
| ethylbenzene                    | ≤3        | 100-41-4   |
| methyl methacrylate             | <1        | 80-62-6    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 and hence require reporting in this section.

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

### Section 4. First aid measures

| Description of necessary first | aid measures   |   |
|--------------------------------|--|---|
| Eye contact                    |  | ater, occasionally lifting the upper and lower<br>ntact lenses. Continue to rinse for at least 10<br>ng exposure or if feeling unwell.  |
| Inhalation                     | is suspected that fumes are still presen<br>or self-contained breathing apparatus.<br>respiratory arrest occurs, provide artific<br>may be dangerous to the person provid<br>Get medical attention. If necessary, ca   | rest in a position comfortable for breathing. If it<br>it, the rescuer should wear an appropriate mask<br>If not breathing, if breathing is irregular or if<br>ial respiration or oxygen by trained personnel. It<br>ling aid to give mouth-to-mouth resuscitation.<br>Il a poison center or physician. If unconscious,<br>ical attention immediately. Maintain an open<br>a collar, tie, belt or waistband.  |
| Skin contact                   | contaminated clothing thoroughly with v<br>Continue to rinse for at least 10 minute  | Remove contaminated clothing and shoes. Wash<br>water before removing it, or wear gloves.<br>s. Get medical attention. In the event of any<br>exposure. Wash clothing before reuse. Clean   |
| Ingestion                      | keep at rest in a position comfortable for<br>the exposed person is conscious, give<br>exposed person feels sick as vomiting<br>unless directed to do so by medical per<br>kept low so that vomit does not enter th<br>call a poison center or physician. Neve<br>person. If unconscious, place in recover | dentures if any. Remove victim to fresh air and<br>or breathing. If material has been swallowed and<br>small quantities of water to drink. Stop if the<br>may be dangerous. Do not induce vomiting<br>rsonnel. If vomiting occurs, the head should be<br>he lungs. Get medical attention. If necessary,<br>er give anything by mouth to an unconscious<br>ery position and get medical attention<br>Loosen tight clothing such as a collar, tie, belt |
| Date of issue/Date of revision | : 10/6/2022  | Version : 2   |
| Date of previous issue         | : 9/30/2022  | 2/14 AkzoNobel  |
|                                |  |   |

### Section 4. First aid measures

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

| Potential acute health effects |   |
|--------------------------------|---|
| Eye contact                    | : No known significant effects or critical hazards.   |
| Inhalation                     | : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.   |
| Skin contact                   | : May cause an allergic skin reaction.  |
| Ingestion                      | : Can cause central nervous system (CNS) depression.  |
| Over-exposure signs/sympto     | <u>ms</u>   |
| Eye contact                    | : No specific data.   |
| Inhalation                     | : Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness   |
| Skin contact                   | : Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion                      | No specific data.   |
| Indication of immediate medic  | al attention and special treatment needed, if necessary   |
| Notes to physician             | <ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large<br/>quantities have been ingested or inhaled.</li> </ul>   |
| Specific treatments            | : No specific treatment.  |
| 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. |

#### See toxicological information (Section 11)

### Section 5. Fire-fighting measures

| Extinguishing media                            |   |  |           |
|--|---|--|-----------|
| Suitable extinguishing media                   | : Use dry chemical, CO <sub>2</sub> ,   | vater spray (fog) or foam.   |           |
| Unsuitable extinguishing media                 | : Do not use water jet.   |  |           |
| Specific hazards arising from the chemical     |   | por. Runoff to sewer may create fire on<br>the increase will occur and the containent<br>on. |           |
| Hazardous thermal decomposition products       | : Decomposition products<br>carbon dioxide<br>carbon monoxide   | may include the following materials:   |           |
| Special protective actions for fire-fighters   | Promptly isolate the scene by removing all persons from the vicinity of the incident if<br>there is a fire. No action shall be taken involving any personal risk or without suitable<br>training. Move containers from fire area if this can be done without risk. Use water<br>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.   |  |           |
| Date of issue/Date of revision                 | : 10/6/2022   | Version : 2  |           |
| Date of previous issue                         | : 9/30/2022   | 3/14   | AkzoNobel |

### Section 6. Accidental release measures

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

| For non-emergency<br>personnel | :   | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilled material. Shut off all ignition sources.<br>No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide<br>adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put<br>on appropriate personal protective equipment.   |
|--------------------------------|-----|---|
| 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".   |
| Environmental precautions      | :   | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air).   |
| Methods and materials for co   | ont | ainment 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 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact |

information and Section 13 for waste disposal.

# Section 7. Handling and storage

| Precautions for safe handling                                      |  |  |  |
|--|--|--|--|
| Protective measures  | : Fut on appropriate personal protect<br>history of skin sensitization problem<br>this product is used. Do not get in<br>mist. Do not ingest. Use only with<br>when ventilation is inadequate. Do<br>adequately ventilated. Keep in the<br>from a compatible material, kept tig<br>from heat, sparks, open flame or an<br>electrical (ventilating, lighting and n<br>tools. Take precautionary measure<br>retain product residue and can be h  | ns should not be employed<br>eyes or on skin or clothing<br>adequate ventilation. We<br>not enter storage areas an<br>original container or an ap<br>htly closed when not in us<br>ny other ignition source. Un<br>naterial handling) equipme<br>as against electrostatic disc | I in any process in which<br>. Do not breathe vapor or<br>ar appropriate respirator<br>nd confined spaces unless<br>oproved alternative made<br>e. Store and use away<br>Use explosion-proof<br>nt. Use only non-sparking<br>charges. Empty containers |
| Advice on general occupational hygiene                             | : Eating, drinking and smoking shoul<br>handled, stored and processed. W<br>drinking and smoking. Remove co<br>entering eating areas. See also Se<br>measures.   | orkers should wash hands<br>ntaminated clothing and pr   | s and face before eating,<br>rotective equipment before  |
| Conditions for safe storage,<br>including any<br>incompatibilities | Store in accordance with local regulations. Store in a segregated and approved area.<br>Store in original container protected from direct sunlight in a dry, cool and well-ventilated<br>area, away from incompatible materials (see Section 10) and food and drink. Store<br>locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep<br>container tightly closed and sealed until ready for use. Containers that have been<br>opened must be carefully resealed and kept upright to prevent leakage. Do not store in<br>unlabeled containers. Use appropriate containment to avoid environmental<br>contamination. See Section 10 for incompatible materials before handling or use. |  |  |
| Date of issue/Date of revision                                     | : 10/6/2022  | Version : 2  |  |
| Date of previous issue   | : 9/30/2022  | 4/14   | AkzoNobel  |

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

| Ingredient name                           | Exposure limits   |
|---|---|
| n-butyl acetate                           | NIOSH REL (United States, 10/2016).STEL: 950 mg/m³ 15 minutes.STEL: 200 ppm 15 minutes.TWA: 710 mg/m³ 10 hours.TWA: 150 ppm 10 hours.TWA: 150 ppm 10 hours.OSHA PEL (United States, 5/2018).TWA: 710 mg/m³ 8 hours.TWA: 150 ppm 8 hours.OSHA PEL 1989 (United States, 3/1989).STEL: 950 mg/m³ 15 minutes.STEL: 200 ppm 15 minutes.TWA: 710 mg/m³ 8 hours.TWA: 150 ppm 8 hours.STEL: 200 ppm 15 minutes.TWA: 150 ppm 8 hours.TWA: 150 ppm 8 hours.TWA: 150 ppm 8 hours.TWA: 150 ppm 8 hours.TWA: 150 ppm 15 minutes.TWA: 150 ppm 15 minutes.TWA: 50 ppm 8 hours.   |
| 2-methoxy-1-methylethyl acetate           | AIHA WEEL (United States, 7/2018).<br>TWA: 50 ppm 8 hours.  |
| xylene                                    | ACGIH TLV (United States, 3/2020). Notes:<br>1996 Adoption Substances for which there<br>is a Biological Exposure Index or Indices<br>Refers to Appendix A Carcinogens.<br>STEL: 651 mg/m <sup>3</sup> 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 434 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.<br>OSHA PEL (United States, 5/2018).<br>TWA: 435 mg/m <sup>3</sup> 8 hours.<br>TWA: 100 ppm 8 hours.<br>OSHA PEL 1989 (United States, 3/1989).<br>STEL: 655 mg/m <sup>3</sup> 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m <sup>3</sup> 8 hours.<br>TWA: 435 mg/m <sup>3</sup> 8 hours.   |
| ethylbenzene<br>methyl methacrylate       | <ul> <li>ACGIH TLV (United States, 3/2020). Notes:<br/>Substances for which there is a Biological<br/>Exposure Index or Indices 2002 Adoption.<br/>TWA: 20 ppm 8 hours.</li> <li>NIOSH REL (United States, 10/2016).</li> <li>STEL: 545 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>TWA: 435 mg/m<sup>3</sup> 10 hours.</li> <li>TWA: 435 mg/m<sup>3</sup> 10 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 100 ppm 8 hours.</li> <li>OSHA PEL 1989 (United States, 3/1989).</li> <li>STEL: 545 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>TWA: 435 mg/m<sup>3</sup> 16 minutes.</li> <li>STEL: 545 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 8 hours.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 8 hours.</li> <li>STEL: 125 ppm 8 hours.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 15 minutes.</li> <li>STEL: 125 ppm 8 hours.</li> </ul> |
|   | sensitizer. Notes: Refers to Appendix A<br>Carcinogens. 2000 Adoption.<br>STEL: 100 ppm 15 minutes.   |
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| TWA: 50 ppm 8 hours.<br>NIOSH REL (United States, 10/2016).   |
|---|
| TWA: 410 mg/m <sup>3</sup> 10 hours.<br>TWA: 100 ppm 10 hours.<br><b>OSHA PEL (United States, 5/2018).</b>    |
| TWA: 410 mg/m <sup>3</sup> 8 hours.<br>TWA: 100 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b> |
| TWA: 410 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.  |

| Appropriate engineering<br>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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. |
|-------------------------------------|---|
| Environmental exposure              | : Emissions from ventilation or work process equipment should be checked to ensure  |

controls controls controls 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.

Individual protection measures

| Hygiene measures       | : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Contaminated work clothing should not be allowed out of the workplace. Wash<br>contaminated clothing before reusing. Ensure that eyewash stations and safety<br>showers are close to the workstation location.  |
|------------------------|--|
| Eye/face protection    | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.  |
| Skin protection        |  |
| Hand protection        | : Chemical-resistant, impervious gloves complying with an approved standard should be<br>worn at all times when handling chemical products if a risk assessment indicates this is<br>necessary. Considering the parameters specified by the glove manufacturer, check<br>during use that the gloves are still retaining their protective properties. It should be<br>noted that the time to breakthrough for any glove material may be different for different<br>glove manufacturers. In the case of mixtures, consisting of several substances, the<br>protection time of the gloves cannot be accurately estimated. |
| 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.  |
| Other skin protection  | <ul> <li>Appropriate footwear and any additional skin protection measures should be selected<br/>based on the task being performed and the risks involved and should be approved by a<br/>specialist before handling this product.</li> </ul>  |
| Respiratory protection | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |



# Section 9. Physical and chemical properties

| <u>Appearance</u>                            |  |  |
|--|--|--|
| Physical state                               | : Liquid.  |  |
| Color  | : Colorless.   |  |
| Odor   | : Characteristic.  |  |
| Odor threshold                               | : Not available.   |  |
| рН   | : Not available.   |  |
| Melting point                                | : Not available.   |  |
| Boiling point                                | : Not available.   |  |
| Flash point                                  | : Closed cup: 28°C (82.4°F)  |  |
| Evaporation rate                             | : Not available.   |  |
| Flammability (solid, gas)                    | : Not available.   |  |
| Upper/lower flammability or explosive limits | : Greatest known range: Lower: 1.4% Upper: 7.6% (n-butyl acetate)  |  |
| Vapor pressure                               | : Not available.   |  |
| Vapor density                                | : Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). Weighted average: 4.09 (Air = 1) |  |
| Relative density                             | : Not available.   |  |
| Solubility(ies)                              | : Insoluble in the following materials: cold water.  |  |
| Partition coefficient: n-<br>octanol/water   | : Not available.   |  |

# Section 10. Stability and reactivity

| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.  |
|------------------------------------|---|
| Chemical stability                 | : The product is stable.  |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.   |
| Conditions to avoid                | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials             | : Reactive or incompatible with the following materials: oxidizing materials  |
| Hazardous decomposition products   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

### Section 11. Toxicological information

#### Information on toxicological effects

| Product/ingredient name       | Result                | Species    | Dose               | Exposure |
|-------------------------------|-----------------------|------------|--------------------|----------|
| n-butyl acetate               | LC50 Inhalation Gas.  | Rat        | 390 ppm            | 4 hours  |
|                               | LC50 Inhalation Vapor | Mouse      | 6 g/m <sup>3</sup> | 2 hours  |
|                               | LD50 Dermal           | Rabbit     | >17600 mg/kg       | -        |
|                               | LD50 Intraperitoneal  | Mouse      | 1230 mg/kg         | -        |
|                               | LD50 Oral             | Guinea pig | 4700 mg/kg         | -        |
|                               | LD50 Oral             | Mouse      | 6 g/kg             | -        |
|                               | LD50 Oral             | Rabbit     | 3200 mg/kg         | -        |
|                               | LD50 Oral             | Rat        | 10768 mg/kg        | -        |
|                               |                       |            |                    |          |
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# Section 11. Toxicological information

|                                       |                       | 1          | 6700 mmm                | 1 h a una |
|---------------------------------------|-----------------------|------------|-------------------------|-----------|
| xylene                                | LC50 Inhalation Gas.  | Rat        | 6700 ppm                | 4 hours   |
|                                       | LC50 Inhalation Gas.  | Rat        | 5000 ppm                | 4 hours   |
|                                       | LC50 Inhalation Gas.  | Rat        | 6670 ppm                | 4 hours   |
|                                       | LD50 Intraperitoneal  | Mouse      | 1548 mg/kg              | -         |
|                                       | LD50 Intraperitoneal  | Mouse      | 1548 mg/kg              | -         |
|                                       | LD50 Intraperitoneal  | Rat        | 2459 mg/kg              | -         |
|                                       | LD50 Oral             | Mouse      | 2119 mg/kg              | -         |
|                                       | LD50 Oral             | Rat        | 4300 mg/kg              | -         |
|                                       | LD50 Oral             | Rat        | 4300 mg/kg              | -         |
|                                       | LD50 Subcutaneous     | Rat        | 1700 mg/kg              | -         |
| ethylbenzene                          | LC50 Inhalation Gas.  | Rabbit     | 4000 ppm                | 4 hours   |
|                                       | LC50 Inhalation Vapor | Mouse      | 35500 mg/m <sup>3</sup> | 2 hours   |
|                                       | LC50 Inhalation Vapor | Rat        | 55000 mg/m <sup>3</sup> | 2 hours   |
|                                       | LD50 Dermal           | Rabbit     | >5000 mg/kg             | -         |
|                                       | LD50 Dermal           | Rabbit     | 17800 uL/kg             | -         |
|                                       | LD50 Intraperitoneal  | Mouse      | 2624 uL/kg              | -         |
|                                       | LD50 Oral             | Rat        | 3500 mg/kg              | -         |
|                                       | LD50 Oral             | Rat        | 3500 mg/kg              | -         |
| nethyl methacrylate                   | LC50 Inhalation Vapor | Mouse      | 18500 mg/m <sup>3</sup> | 2 hours   |
| , , , , , , , , , , , , , , , , , , , | LC50 Inhalation Vapor | Rat        | 78000 mg/m <sup>3</sup> | 4 hours   |
|                                       | LD50 Dermal           | Rabbit     | >5 g/kg                 | -         |
|                                       | LD50 Intraperitoneal  | Guinea pig | 1890 mg/kg              | -         |
|                                       | LD50 Intraperitoneal  | Mouse      | 945 mg/kg               | -         |
|                                       | LD50 Intraperitoneal  | Rat        | 1328 mg/kg              | _         |
|                                       | LD50 Oral             | Guinea pig | 5954 mg/kg              | _         |
|                                       | LD50 Oral             | Mouse      | 3625 mg/kg              | _         |
|                                       | LD50 Oral             | Rabbit     | 8700 mg/kg              | _         |
|                                       | LD50 Oral             | Rat        | 7872 mg/kg              | _         |
|                                       | LD50 Subcutaneous     | Guinea pig | 5954 mg/kg              | -         |
|                                       | LD50 Subcutaneous     | Mouse      | 5954 mg/kg              | -         |
|                                       | LD50 Subcutaneous     | Rat        | 7088 mg/kg              | _         |
|                                       |                       | T CI       | , 500 mg/ng             |           |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure            | Observation |
|-------------------------|--------------------------|---------|-------|---------------------|-------------|
| n-butyl acetate         | Eyes - Moderate irritant | Rabbit  | -     | 100 mg              | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500        | -           |
| xylene                  | Eyes - Mild irritant     | Rabbit  | -     | mg<br>87 mg         | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 5          | -           |
|                         | Skin - Mild irritant     | Rat     | -     | mg<br>8 hours 60 UI | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500        | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | mg<br>100 %         | -           |
| ethylbenzene            | Eyes - Severe irritant   | Rabbit  | -     | 500 mg              | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15<br>mg   | -           |

#### Sensitization

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Classification**



# Section 11. Toxicological information

|   | 0    |              |             |
|---|------|--------------|-------------|
| Product/ingredient name                       | OSHA | IARC         | NTP         |
| xylene<br>ethylbenzene<br>methyl methacrylate |      | 3<br>2B<br>3 | -<br>-<br>- |

#### Reproductive toxicity

Not available.

#### <u>Teratogenicity</u>

Not available.

#### Specific target organ toxicity (single exposure)

| Name                            | Category   | Route of exposure | Target organs                   |
|---------------------------------|------------|-------------------|---------------------------------|
| n-butyl acetate                 | Category 3 | -                 | Narcotic effects                |
| 2-methoxy-1-methylethyl acetate | Category 3 | -                 | Narcotic effects                |
| xylene                          | Category 3 | -                 | Respiratory tract<br>irritation |
| methyl methacrylate             | Category 3 | -                 | Respiratory tract<br>irritation |

#### Specific target organ toxicity (repeated exposure)

| Name         | Category   | Route of<br>exposure | Target organs  |
|--------------|------------|----------------------|----------------|
| ethylbenzene | Category 2 | -                    | hearing organs |

#### Aspiration hazard

| Name | Result   |
|------|--|
|      | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

| Information on the likely routes of exposure      | : Not available.  |
|---|---|
| Potential acute health effect                     | <u>S</u>  |
| Eye contact                                       | : No known significant effects or critical hazards.   |
| Inhalation  | : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.   |
| Skin contact                                      | : May cause an allergic skin reaction.  |
| Ingestion   | : Can cause central nervous system (CNS) depression.  |
| <u>Symptoms related to the phy</u><br>Eye contact | <ul> <li>vsical, chemical and toxicological characteristics</li> <li>No specific data.</li> </ul>   |
| Inhalation  | : Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness |
| Skin contact                                      | : Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion   | : No specific data.   |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

| Date of issue/Date of revision | : 10/6/2022 | Version : 2 |           |
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# Section 11. Toxicological information

| Potential immediate<br>effects | : Not available.   |
|--------------------------------|--|
| Potential delayed effects      | : Not available.   |
| Long term exposure             |  |
| Potential immediate<br>effects | : Not available.   |
| Potential delayed effects      | : Not available.   |
| Potential chronic health eff   | <u>ects</u>  |
| Not available.                 |  |
| General                        | : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity                | : 📈 known significant effects or critical hazards.   |
| Mutagenicity                   | : No known significant effects or critical hazards.  |
| Reproductive toxicity          | : No known significant effects or critical hazards.  |
|                                |  |

# Section 12. Ecological information

| <u>Foxicity</u>                |                                     |  |          |  |
|--------------------------------|-------------------------------------|--|----------|--|
| Product/ingredient name        | Result                              | Species  | Exposure |  |
| n-butyl acetate                | Acute LC50 32 mg/l Marine water     | Crustaceans - Artemia salina   | 48 hours |  |
| -                              | Acute LC50 100000 µg/l Fresh water  | Fish - Lepomis macrochirus   | 96 hours |  |
|                                | Acute LC50 18000 µg/l Fresh water   | Fish - Pimephales promelas   | 96 hours |  |
|                                | Acute LC50 185000 µg/l Marine water | Fish - Menidia beryllina   | 96 hours |  |
|                                | Acute LC50 62000 µg/l Fresh water   | Fish - Danio rerio   | 96 hours |  |
| xylene                         | Acute EC50 90 mg/l Fresh water      | Crustaceans - Cypris subglobosa  | 48 hours |  |
|                                | Acute LC50 8.5 ppm Marine water     | Crustaceans - Palaemonetes pugio - Adult                                     | 48 hours |  |
|                                | Acute LC50 8500 μg/l Marine water   | Crustaceans - Palaemonetes   | 48 hours |  |
|                                | Acute LC50 15700 μg/l Fresh water   | Fish - Lepomis macrochirus -<br>Juvenile (Fledgling, Hatchling,<br>Weanling) | 96 hours |  |
|                                | Acute LC50 20870 µg/l Fresh water   | Fish - Lepomis macrochirus   | 96 hours |  |
|                                | Acute LC50 19000 µg/l Fresh water   | Fish - Lepomis macrochirus   | 96 hours |  |
|                                | Acute LC50 13400 µg/l Fresh water   | Fish - Pimephales promelas   | 96 hours |  |
|                                | Acute LC50 16940 µg/l Fresh water   | Fish - Carassius auratus   | 96 hours |  |
| ethylbenzene                   | Acute EC50 4900 µg/l Marine water   | Algae - Skeletonema costatum   | 72 hours |  |
|                                | Acute EC50 7700 µg/l Marine water   | Algae - Skeletonema costatum   | 96 hours |  |
|                                | Acute EC50 4600 µg/l Fresh water    | Algae - Pseudokirchneriella subcapitata                                      | 72 hours |  |
|                                | Acute EC50 5400 µg/l Fresh water    | Algae - Pseudokirchneriella<br>subcapitata                                   | 72 hours |  |
|                                | Acute EC50 3600 µg/l Fresh water    | Algae - Pseudokirchneriella<br>subcapitata                                   | 96 hours |  |
|                                | Acute EC50 6.53 mg/l Marine water   | Crustaceans - Artemia sp<br>Nauplii  | 48 hours |  |
|                                | Acute EC50 13.3 mg/l Marine water   | Crustaceans - Artemia sp<br>Nauplii  | 48 hours |  |
|                                | Acute EC50 2.97 mg/l Fresh water    | Daphnia - Daphnia magna -<br>Neonate   | 48 hours |  |
|                                | Acute EC50 2.93 mg/l Fresh water    | Daphnia - Daphnia magna -<br>Neonate   | 48 hours |  |
|                                | Acute LC50 8.78 mg/l Marine water   | Crustaceans - Artemia sp   | 48 hours |  |
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FRS-40 GLOSS BASE VARNISH

# Section 12. Ecological information

|                     |                                    | N1   |          |
|---------------------|------------------------------------|--|----------|
|                     |                                    | Nauplii  |          |
|                     | Acute LC50 13.3 mg/l Marine water  | Crustaceans - Artemia sp<br>Nauplii  | 48 hours |
|                     | Acute LC50 40000 µg/l Marine water | Crustaceans - Cancer magister -<br>Zoea                                      | 48 hours |
|                     | Acute LC50 18.4 mg/l Fresh water   | Daphnia - Daphnia magna -<br>Neonate   | 48 hours |
|                     | Acute LC50 13.9 mg/l Fresh water   | Daphnia - Daphnia magna -<br>Neonate   | 48 hours |
|                     | Acute LC50 75000 µg/l Fresh water  | Daphnia - Daphnia magna  | 48 hours |
|                     | Acute LC50 5100 µg/l Marine water  | Fish - Menidia menidia   | 96 hours |
|                     | Acute LC50 9090 µg/l Fresh water   | Fish - Pimephales promelas   | 96 hours |
|                     | Acute LC50 9100 µg/l Fresh water   | Fish - Pimephales promelas   | 96 hours |
|                     | Acute LC50 4200 µg/l Fresh water   | Fish - Oncorhynchus mykiss   | 96 hours |
|                     | Acute LC50 4.3 ul/L Marine water   | Fish - Morone saxatilis - Juvenile<br>(Fledgling, Hatchling, Weanling)       | 96 hours |
| methyl methacrylate | Acute LC50 191000 μg/l Fresh water | Fish - Lepomis macrochirus -<br>Juvenile (Fledgling, Hatchling,<br>Weanling) | 96 hours |
|                     | Acute LC50 159100 µg/l Fresh water | Fish - Pimephales promelas   | 96 hours |
|                     | Acute LC50 160200 µg/l Fresh water | Fish - Pimephales promelas   | 96 hours |
|                     | Acute LC50 150000 µg/l Fresh water | Fish - Pimephales promelas -<br>Adult  | 96 hours |
|                     | Acute LC50 130000 μg/l Fresh water | Fish - Pimephales promelas -<br>Adult  | 96 hours |

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

| Product/ingredient name             | LogPow      | BCF         | Potential  |
|-------------------------------------|-------------|-------------|------------|
| n-butyl acetate                     | 2.3         | -           | low        |
| 2-methoxy-1-methylethyl acetate     | 1.2         | -           | low        |
| xylene                              | 3.12        | 8.1 to 25.9 | low        |
| ethylbenzene<br>methyl methacrylate | 3.6<br>1.38 | -           | low<br>low |

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

| Disposal methods               | of this product, solution<br>requirements of enviro<br>regional local authority<br>via a licensed waste di<br>the sewer unless fully of<br>Waste packaging shou<br>when recycling is not for<br>safe way. Care should<br>cleaned or rinsed out.<br>Vapor from product res | te should be avoided or minimized whereve<br>hs and any by-products should at all times of<br>nmental protection and waste disposal legis<br>requirements. Dispose of surplus and non<br>sposal contractor. Waste should not be dis<br>compliant with the requirements of all author<br>ild be recycled. Incineration or landfill shou<br>easible. This material and its container must<br>be taken when handling emptied container<br>Empty containers or liners may retain some<br>sidues may create a highly flammable or ex<br>bo not cut, weld or grind used containers un | comply with the<br>slation and any<br>n-recyclable products<br>sposed of untreated to<br>prities with jurisdiction.<br>Id only be considered<br>st be disposed of in a<br>rs that have not been<br>e product residues.<br>splosive atmosphere |
|--------------------------------|---|---|---|
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### Section 13. Disposal considerations

cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                               | CAS # |        | Reference<br>number |
|--|-------|--------|---------------------|
| Reaction mass of ethylbenzene and xylene | -     | Listed | U239                |

### Section 14. Transport information

The information provided in section 14 is based on a bulk package shipment via ground transport in North America. All shippers are responsible for ensuring the proper transportation classification and package/container requirements are followed for the relevant mode of transport.

|                               | DOT Classification | IMDG   | IATA   |
|-------------------------------|--------------------|--------|--------|
| UN number                     | UN1263             | UN1263 | UN1263 |
| UN proper shipping name       | PAINT              | PAINT  | PAINT  |
| Transport hazard<br>class(es) | 3                  | 3      | 3      |
| Packing group                 | 111                |        | III    |
| Environmental<br>hazards      | No.                | No.    | No.    |
| Additional information        |                    |        |        |

| DOT Classification           | : | <b>Reportable quantity</b> 1140.3 lbs / 517.72 kg [142.61 gal / 539.85 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. |
|------------------------------|---|---|
| IMDG                         | : | <b>Emergency schedules</b> F-E, _S-E_<br><b>Viscous liquid exception</b> This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.   |
| Special precautions for user | : | <b>Transport within user's premises:</b> 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.                     |
| Transport in bulk according  | : | Not available.  |

to IMO instruments

### Section 15. Regulatory information

| U.S. Federal regulations | : United States inventory (TSCA 8b): Not determined. |
|--------------------------|--|
|--------------------------|--|

| State regulations              |                          |   |                    |
|--------------------------------|--------------------------|---|--------------------|
| Massachusetts                  |                          | ts are listed: BUTYL ACETATE; N-B<br>CETATE; XYLENE; DIMETHYLBENZ |                    |
| New York                       | : The following componen | ts are listed: Butyl acetate; Butyl ace                           | tate; Xylene mixed |
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### Section 15. Regulatory information

: The following components are listed: n-BUTYL ACETATE; ACETIC ACID, BUTYL ESTER; n-BUTYL ACETATE; ACETIC ACID, BUTYL ESTER; XYLENES; BENZENE, DIMETHYL-

Pennsylvania

: The following components are listed: ACETIC ACID, BUTYL ESTER; ACETIC ACID, BUTYL ESTER; BENZENE, DIMETHYL-

#### California Prop. 65

#### MARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

| Ingredient name | 0    | Maximum<br>acceptable dosage<br>level |
|-----------------|------|---------------------------------------|
| ethylbenzene    | Yes. | -                                     |
| toluene         | -    | Yes.                                  |

#### Inventory list

Canada

: At least one component is not listed in DSL but all such components are listed in NDSL.

### Section 16. Other information

#### Procedure used to derive the classification

| Classification  |                                | Justification                               |
|---|--------------------------------|---|
| AMMABLE LIQUIDS - Category 3<br>SKIN SENSITIZATION - Category 1               |                                | On basis of test data<br>Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -         |                                | Calculation method                          |
| Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |                                | Calculation method                          |
| SPECIFIC TARGET ORGAN TOXICITY (R   | EPEATED EXPOSURE) - Category 2 | Calculation method                          |

| <u>History</u>                  |  |
|---------------------------------|--|
| Date of printing                | : 6 October 2022   |
| Date of issue/ Date of revision | : 6 October 2022   |
| Date of previous issue          | : 30 September 2022  |
| Version                         | : 2  |
| Key to abbreviations            | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = International Air Transport Association<br>IBC = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973<br>as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>N/A = Not available<br>SGG = Segregation Group<br>UN = United Nations |

#### Indicates information that has changed from previously issued version.

#### Notice to reader

#### FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage

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# Section 16. Other information

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