

# SAFETY DATA SHEET

# 1. Identification

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|--|--|--|--|
| Product identifier   | Boron nitride aerosol spray  |  |  |
| Other means of identification<br>SDS number  | 1EF  |  |  |
| Materion Code  | 1EF  |  |  |
| Manufacturer/Importer/Supplier/Dis<br>Manufacturer   | stributor information  |  |  |
| Company name<br>Address  | Materion Electronic Materials<br>6070 Parkland Blvd<br>Mayfield Heights, Ohio 44124<br>United States   |  |  |
| Telephone<br>E-mail<br>Contact person<br>Emergency phone number  | 1.216.383.4019<br>Materion-PS@materion.com<br>Product Stewardship Director<br>See Section 16   |  |  |
| 2. Hazard(s) identification  |  |  |  |
| Physical hazards<br>Health hazards   | Flammable aerosols<br>Acute toxicity, dermal<br>Skin corrosion/irritation<br>Serious eye damage/eye irritation<br>Carcinogenicity<br>Specific target organ toxicity, single exposure<br>Specific target organ toxicity, repeated<br>exposure | Category 1<br>Category 4<br>Category 2<br>Category 2A<br>Category 2<br>Category 3 narcotic effects<br>Category 1 |  |
| Environmental hazards  | Not classified.  |  |  |

**OSHA** defined hazards Label elements

Signal word

Hazard statement

Precautionary statement Prevention



#### Danger

Not classified.

Extremely flammable aerosol. Flammable aerosol. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist/vapors. Avoid breathing dust/fume/gas/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

| Response                                     | If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention advice/attention. Take off contaminated clothing and wash it before reuse. |
|--|--|
| Storage                                      | Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |
| Disposal                                     | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| Hazard(s) not otherwise<br>classified (HNOC) | None known.  |
| Supplemental information                     | For further information, please contact the Product Stewardship Department at +1.800.862.4118.   |

# 3. Composition/information on ingredients

Mixtures

| Chemical name             | Common name and synonyms | CAS number | %       |
|---------------------------|--------------------------|------------|---------|
| Acetone                   |                          | 67-64-1    | 30 - 35 |
| RM Ethanol; Ethyl Alcohol |                          | 64-17-5    | 20 - 23 |
| RM Boron nitride          |                          | 10043-11-5 | 10 - 15 |
| RM Propane                |                          | 74-98-6    | 10 - 13 |
| RM N-butane               |                          | 106-97-8   | 10 - 12 |
| RM N-butyl Acetate        |                          | 123-86-4   | 1 - 3   |
| RM Xylene                 |                          | 1330-20-7  | 1 - 2   |
| RM Ethylbenzene           |                          | 100-41-4   | ≤ 1     |

### 4. First-aid measures

| Inhalation   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poiso center or doctor/physician if you feel unwell.  |  |  |
|--|---|--|--|
| Skin contact   | Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.  |  |  |
| Eye contact  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  |  |  |
| Ingestion  | Rinse mouth. Get medical advice/attention if you feel unwell.   |  |  |
| Most important<br>symptoms/effects, acute and<br>delayed               | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.  |  |  |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.  |  |  |
| General information  | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |  |  |
| 5. Fire-fighting measures  |   |  |  |
| Suitable extinguishing media   | Alcohol resistant foam. Powder. Carbon dioxide (CO2).   |  |  |
| Unsuitable extinguishing media   | Do not use water jet as an extinguisher, as this will spread the fire.  |  |  |
| Specific hazards arising from the chemical                             | Contents under pressure. Pressurized container may explode when exposed to heat or flame.<br>During fire, gases hazardous to health may be formed.  |  |  |
| Special protective equipment<br>and precautions for firefighters       | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |  |  |

| Fire fighting<br>equipment/instructions                                   | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.   |
|---|--|
| Specific methods  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.   |
| General fire hazards  | Extremely flammable aerosol. Flammable aerosol.  |
| 6. Accidental release meas  | ures   |
| Personal precautions, protective<br>equipment and emergency<br>procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear<br>appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not<br>touch damaged containers or spilled material unless wearing appropriate protective clothing.<br>Ventilate closed spaces before entering them. Local authorities should be advised if significant<br>spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| Methods and materials for containment and cleaning up                     | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.<br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste   |
| Environmental precautions   | disposal, see section 13 of the SDS.<br>Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all<br>environmental releases. Avoid discharge into drains, water courses or onto the ground.  |
| 7. Handling and storage   |  |
| Precautions for safe handling   | Obtain special instructions before use. Do not handle until all safety precautions have been read<br>and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray<br>button is missing or defective. Do not spray on a naked flame or any other incandescent material.<br>Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill,<br>grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used<br>when handling the product must be grounded. Do not re-use empty containers. Do not breathe<br>mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using,<br>do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only in<br>well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly<br>after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene<br>practices. |
| Conditions for safe storage,<br>including any incompatibilities           | Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).  |
| 8 Exposure controls/persor  | nal protection   |

# 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Components                                 | Туре | Value      |  |
|--|------|------------|--|
| Acetone (CAS 67-64-1)                      | PEL  | 2400 mg/m3 |  |
|  |      | 1000 ppm   |  |
| RM Ethanol; Ethyl Alcohol<br>(CAS 64-17-5) | PEL  | 1900 mg/m3 |  |

| US. OSHA Table Z-1 Permissible Ex<br>Components | Туре                            | Value      | - |  |
|---|---------------------------------|------------|---|--|
|   |                                 | 1000 ppm   |   |  |
| RM Ethylbenzene (CAS<br>100-41-4)               | PEL                             | 435 mg/m3  |   |  |
|   |                                 | 100 ppm    |   |  |
| RM N-butyl Acetate (CAS<br>23-86-4)             | PEL                             | 710 mg/m3  |   |  |
|   |                                 | 150 ppm    |   |  |
| RM Propane (CAS 74-98-6)                        | PEL                             | 1800 mg/m3 |   |  |
|   |                                 | 1000 ppm   |   |  |
| RM Xylene (CAS<br>330-20-7)                     | PEL                             | 435 mg/m3  |   |  |
|   |                                 | 100 ppm    |   |  |
| JS. ACGIH Threshold Limit Values (              |                                 |            |   |  |
| Components                                      | Туре                            | Value      |   |  |
| Acetone (CAS 67-64-1)                           | STEL                            | 500 ppm    |   |  |
|   | TWA                             | 250 ppm    |   |  |
| RM Ethanol; Ethyl Alcohol<br>CAS 64-17-5)       | STEL                            | 1000 ppm   |   |  |
| RM Ethylbenzene (CAS<br>100-41-4)               | TWA                             | 20 ppm     |   |  |
| RM N-butane (CAS<br>106-97-8)                   | STEL                            | 1000 ppm   |   |  |
| RM N-butyl Acetate (CAS<br>123-86-4)            | STEL                            | 150 ppm    |   |  |
|   | TWA                             | 50 ppm     |   |  |
| RM Xylene (CAS<br>I 330-20-7)                   | TWA                             | 20 ppm     |   |  |
| NIOSH. Immediately Dangerous to L               | ife or Health (IDLH) Values, as | amended    |   |  |
| Components                                      | Туре                            | Value      |   |  |
| Acetone (CAS 67-64-1)                           | IDLH                            | 2.5 %      |   |  |
|   |                                 | 2500 ppm   |   |  |
| RM Ethanol; Ethyl Alcohol<br>CAS 64-17-5)       | IDLH                            | 3.3 %      |   |  |
|   |                                 | 3300 ppm   |   |  |
| RM Ethylbenzene (CAS<br>100-41-4)               | IDLH                            | 0.8 %      |   |  |
|   |                                 | 800 ppm    |   |  |
| RM N-butane (CAS<br>106-97-8)                   | IDLH                            | 1.6 %      |   |  |
|   |                                 | 2000 ppm   |   |  |
|   |                                 | 1600 ppm   |   |  |
| RM N-butyl Acetate (CAS<br>123-86-4)            | IDLH                            | 1.7 %      |   |  |
|   |                                 | 1700 ppm   |   |  |
| RM Propane (CAS 74-98-6)                        | IDLH                            | 2.1 %      |   |  |
|   |                                 | 2100 ppm   |   |  |

| Components                                 | Туре | Value      |  |
|--|------|------------|--|
| Acetone (CAS 67-64-1)                      | TWA  | 590 mg/m3  |  |
|  |      | 250 ppm    |  |
| RM Ethanol; Ethyl Alcohol<br>(CAS 64-17-5) | TWA  | 1900 mg/m3 |  |
|  |      | 1000 ppm   |  |
| RM Ethylbenzene (CAS<br>100-41-4)          | STEL | 545 mg/m3  |  |
|  |      | 125 ppm    |  |
|  | TWA  | 435 mg/m3  |  |
|  |      | 100 ppm    |  |
| RM N-butane (CAS<br>106-97-8)              | TWA  | 1900 mg/m3 |  |
|  |      | 800 ppm    |  |
| RM N-butyl Acetate (CAS<br>123-86-4)       | STEL | 950 mg/m3  |  |
|  |      | 200 ppm    |  |
|  | TWA  | 710 mg/m3  |  |
|  |      | 150 ppm    |  |
| RM Propane (CAS 74-98-6)                   | TWA  | 1800 mg/m3 |  |
|  |      | 1000 ppm   |  |
| RM Xylene (CAS<br>1330-20-7)               | STEL | 655 mg/m3  |  |
|  |      | 150 ppm    |  |
|  | TWA  | 435 mg/m3  |  |
|  |      | 100 ppm    |  |

# US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

## US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

| Components                                 | Туре    | Value      |  |
|--|---------|------------|--|
| Acetone (CAS 67-64-1)                      | Ceiling | 3000 ppm   |  |
|  | PEL     | 1200 mg/m3 |  |
|  |         | 500 ppm    |  |
|  | STEL    | 1780 mg/m3 |  |
|  |         | 750 ppm    |  |
| RM Ethanol; Ethyl Alcohol<br>(CAS 64-17-5) | PEL     | 1900 mg/m3 |  |
|  |         | 1000 ppm   |  |
| RM Ethylbenzene (CAS<br>100-41-4)          | PEL     | 22 mg/m3   |  |
|  |         | 5 ppm      |  |
|  | STEL    | 130 mg/m3  |  |
|  |         | 30 ppm     |  |
| RM N-butane (CAS<br>106-97-8)              | PEL     | 1900 mg/m3 |  |
|  |         | 800 ppm    |  |
| RM N-butyl Acetate (CAS<br>123-86-4)       | PEL     | 710 mg/m3  |  |
|  |         | 150 ppm    |  |
|  | STEL    | 950 mg/m3  |  |

### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

| Components                   | Туре    | Value      |  |
|------------------------------|---------|------------|--|
|                              |         | 200 ppm    |  |
| RM Propane (CAS 74-98-6)     | PEL     | 1800 mg/m3 |  |
|                              |         | 1000 ppm   |  |
| RM Xylene (CAS<br>1330-20-7) | Ceiling | 300 ppm    |  |
|                              | PEL     | 435 mg/m3  |  |
|                              |         | 100 ppm    |  |
|                              | STEL    | 655 mg/m3  |  |
|                              |         | 150 ppm    |  |

### **Biological limit values**

### ACGIH Biological Exposure Indices (BEI)

| Components                        | Value    | Determinant   | Specimen               | Sampling Time |
|-----------------------------------|----------|---|------------------------|---------------|
| Acetone (CAS 67-64-1)             | 25 mg/l  | Acetone   | Urine                  | *             |
| RM Ethylbenzene (CAS<br>100-41-4) | 0.15 g/g | Sum of<br>mandelic acid<br>and<br>phenylglyoxylic<br>acid | Creatinine in<br>urine | *             |
| RM Xylene (CAS<br>1330-20-7)      | 1.5 g/g  | Methylhippuric<br>acids                                   | Creatinine in urine    | *             |

\* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

#### Individual protection measures, such as personal protective equipment

| Eye/face protection                | Chemical respirator with organic vapor cartridge and full facepiece.  |
|------------------------------------|---|
| Skin protection<br>Hand protection | Wear appropriate chemical resistant gloves.   |
| Other                              | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.  |
| Respiratory protection             | Chemical respirator with organic vapor cartridge and full facepiece.  |
| Thermal hazards                    | Wear appropriate thermal protective clothing, when necessary.   |
| General hygiene considerations     | Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

### 9. Physical and chemical properties

| Appearance                   |                                  |
|------------------------------|----------------------------------|
| Physical state               | Liquid.                          |
| Form                         | Aerosol.                         |
| Color                        | Not available.                   |
| Odor                         | Not available.                   |
| Odor threshold               | Not available.                   |
| рН                           | Not available.                   |
| Melting point/freezing point | -305.68 °F (-187.6 °C) estimated |
|                              |                                  |

| Initial boiling point and boiling<br>range | 31.1 °F (-0.5 °C) estimated  |
|--|--|
| Flash point                                | -156.0 °F (-104.4 °C) estimated  |
| Evaporation rate                           | Not available.   |
| Flammability (solid, gas)                  | Not applicable.  |
| Upper/lower flammability or explos         | sive limits  |
| Explosive limit - lower (%)                | 1.2 % estimated  |
| Explosive limit - upper (%)                | 12.8 % estimated   |
| Vapor pressure                             | 2109.41 hPa estimated  |
| Vapor density                              | Not available.   |
| Relative density                           | Not available.   |
| Solubility(ies)                            |  |
| Solubility (water)                         | Not available.   |
| Partition coefficient<br>(n-octanol/water) | Not available.   |
| Auto-ignition temperature                  | 548.6 °F (287 °C) estimated  |
| Decomposition temperature                  | Not available.   |
| Viscosity                                  | Not available.   |
| Other information                          |  |
| Density                                    | 0.70 g/cm3 estimated   |
| Explosive properties                       | Not explosive.   |
| Flammability class                         | Flammable IA estimated   |
| Heat of combustion (NFPA 30B)              | 39.33 kJ/g estimated   |
| Oxidizing properties                       | Not oxidizing.   |
| Percent volatile                           | 65 % estimated   |
| Specific gravity                           | 0.7 estimated  |
| VOC  | 66.5 % estimated   |
| 10. Stability and reactivity               |  |
| Reactivity                                 | The product is stable and non-reactive under normal conditions of use, storage and transport.  |
| Chemical stability                         | Material is stable under normal conditions.  |
| Possibility of hazardous<br>reactions      | Hazardous polymerization does not occur.   |
| Conditions to avoid                        | Avoid temperatures exceeding the flash point. Contact with incompatible materials.   |
| Incompatible materials                     | Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine. Chlorine.  |
| Hazardous decomposition<br>products        | No dangerous reaction known under conditions of normal use.  |
| 11. Toxicological informatio               | n  |
| Information on likely routes of exp        |  |
| Inhalation                                 | May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.  |
| Olde contact                               | Learner de la contracteur de |

|  | narmiu.   |
|--|---|
| Skin contact   | Harmful in contact with skin. Causes skin irritation.   |
| Eye contact  | Causes serious eye irritation.  |
| Ingestion  | Expected to be a low ingestion hazard.  |
| Symptoms related to the<br>physical, chemical and<br>toxicological characteristics | May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation.<br>Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May<br>cause redness and pain. |

| Information on toxicological ef            | Harmful in contact with skin.                |                    |
|--|--|--------------------|
| Acute toxicity                             |  | Toot Docutto       |
| Product                                    | Species                                      | Test Results       |
| Boron nitride aerosol spray                |  |                    |
| <u>Acute</u><br>Inhalation                 |  |                    |
| LC50                                       | Rat  | 143 mg/l, 8 Hours  |
|  | ivat   |                    |
| <b>Oral</b><br>LD50                        | Rat  | 15147 malka        |
|  |  | 15147 mg/kg        |
| Components                                 | Species                                      | Test Results       |
| Acetone (CAS 67-64-1)<br><u>Acute</u>      |  |                    |
| <u>Acute</u><br>Inhalation                 |  |                    |
| LC50                                       | Rat  | 50.1 mg/l, 8 Hours |
| Oral                                       |  |                    |
| LD50                                       | Rat  | 5800 mg/kg         |
|  |  |                    |
| RM Boron nitride (CAS 10043                | -11-0)                                       |                    |
| <u>Acute</u><br>Inhalation                 |  |                    |
| LC50                                       | Rat  | > 2 mg/m3, 4 Hours |
|  |  |                    |
| RM Ethanol; Ethyl Alcohol (CA              | <del>\</del> 0 04-17-0)                      |                    |
| <u>Acute</u><br>Oral                       |  |                    |
| LD50                                       | Rat  | 6.2 g/kg           |
|  |  | 0.2 ymy            |
| RM Ethylbenzene (CAS 100-4<br><u>Acute</u> | + I-++)                                      |                    |
| <u>Acute</u><br>Dermal                     |  |                    |
| LD50                                       | Rabbit                                       | 17800 mg/kg        |
|  | Kabbit                                       | n ooo mg/kg        |
| <b>Oral</b><br>LD50                        | Rat  | 3500 mg/kg         |
|  |  | SSOO Hig/kg        |
| RM N-butyl Acetate (CAS 123                | -oo-4)                                       |                    |
| <u>Acute</u><br>Dermal                     |  |                    |
| LD50                                       | Rabbit                                       | > 5000 mg/kg       |
|  | Kabbit                                       | ~ 5000 mg/kg       |
| <b>Oral</b><br>LD50                        | Rat  | > 3200 mg/kg       |
|  | Mai  | ~ 5200 mg/kg       |
| RM Xylene (CAS 1330-20-7)                  |  |                    |
| <u>Acute</u>                               |  |                    |
| <b>Dermal</b><br>LD50                      | Rabbit                                       | > 43 g/kg          |
|  |  | ~ +0 y/Ny          |
| Oral                                       | Pot  | 2522 8600 maller   |
| LD50                                       | Rat  | 3523 - 8600 mg/kg  |
| * Estimates for product m                  | ay be based on additional component data not | shown.             |
| Skin corrosion/irritation                  | Causes skin irritation.                      |                    |
| Serious eye damage/eye                     | Causes serious eye irritation.               |                    |

| Respiratory or skin sensitization                     |  |   |
|---|--|---|
| Respiratory sensitization                             | Not a respiratory sensitizer.                        |   |
| Skin sensitization                                    | This product is not expected                         | d to cause skin sensitization.  |
| Germ cell mutagenicity                                | No data available to indicat mutagenic or genotoxic. | e product or any components present at greater than 0.1% are                                    |
| Carcinogenicity                                       | Suspected of causing cance                           | er.   |
| IARC Monographs. Overall E                            | Evaluation of Carcinogenicity                        |   |
| RM Ethylbenzene (CAS                                  | 100-41-4)  | 2B Possibly carcinogenic to humans.   |
| RM Xylene (CAS 1330-2                                 | 20-7)  | 3 Not classifiable as to carcinogenicity to humans.   |
| OSHA Specifically Regulated                           | d Substances (29 CFR 1910.10                         | 001-1053)   |
| Not listed.   |  |   |
| US. National Toxicology Pro                           | gram (NTP) Report on Carcino                         | gens  |
| Not listed.   |  |   |
| Reproductive toxicity                                 | Components in this product<br>laboratory animals.    | have been shown to cause birth defects and reproductive disorders in                            |
| Specific target organ toxicity -<br>single exposure   | May cause drowsiness or d                            | izziness.   |
| Specific target organ toxicity -<br>repeated exposure | Causes damage to organs                              | through prolonged or repeated exposure.   |
| Aspiration hazard                                     | Not an aspiration hazard.                            |   |
| Chronic effects                                       | • •  | e harmful. Causes damage to organs through prolonged or repeated ure may cause chronic effects. |
| 12. Ecological information                            |  |   |

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product                 |                    | Species  | Test Results                      |
|-------------------------|--------------------|--|-----------------------------------|
| Boron nitride aerosol s | spray              |  |                                   |
| Aquatic                 |                    |  |                                   |
| Crustacea               | EC50               | Daphnia  | 17773.6973 mg/l, 48 hours         |
| Fish                    | LC50               | Fish   | 2007.5259 mg/l, 96 hours          |
| Acute                   |                    |  |                                   |
| Crustacea               | EC50               | Daphnia  | 28.8927 mg/l, 48 hours estimated  |
| Fish                    | LC50               | Fish   | 116.3048 mg/l, 96 hours estimated |
| Components              |                    | Species  | Test Results                      |
| Acetone (CAS 67-64-1    | 1)                 |  |                                   |
| Aquatic                 |                    |  |                                   |
| Acute                   |                    |  |                                   |
| Crustacea               | EC50               | Water flea (Daphnia magna)                             | 10294 - 17704 mg/l, 48 hours      |
| Fish                    | LC50               | Rainbow trout,donaldson trout<br>(Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours        |
| RM Ethanol; Ethyl Alco  | ohol (CAS 64-17-5) | •  |                                   |
| Aquatic                 |                    |  |                                   |
| Acute                   |                    |  |                                   |
| Crustacea               | EC50               | Water flea (Daphnia magna)                             | 7.7 - 11.2 mg/l, 48 hours         |
| Fish                    | LC50               | Rainbow trout,donaldson trout (Oncorhynchus mykiss)    | 42 mg/l, 4 days                   |
|                         |                    |  |                                   |

| Components                            |   | Species  | Test Results  |
|---------------------------------------|---|--|---|
| RM Ethylbenzene (CAS 100              | -41-4)  |  |   |
| Aquatic                               |   |  |   |
| Acute                                 |   |  |   |
| Crustacea                             | EC50  | Water flea (Daphnia magna)   | 1.37 - 4.4 mg/l, 48 hours   |
| Fish                                  | LC50  | Atlantic silverside (Menidia menidia)  | 4.4 - 5.7 mg/l, 96 hours  |
| RM N-butyl Acetate (CAS 12            | 23-86-4)  |  |   |
| Aquatic                               |   |  |   |
| Acute                                 |   |  |   |
| Fish                                  | LC50  | Fathead minnow (Pimephales promelas)   | 17 - 19 mg/l, 96 hours  |
| RM Xylene (CAS 1330-20-7              | )   | , i i ,  |   |
| Aquatic                               | )   |  |   |
| Acute                                 |   |  |   |
| Fish                                  | LC50  | Rainbow trout,donaldson trout<br>(Oncorhynchus mykiss)   | 6.702 - 10.032 mg/l, 96 hours   |
| * Estimates for product may           | be based on a   | additional component data not shown.   |   |
| rsistence and degradability           | No data is  | available on the degradability of this product.  |   |
| accumulative potential                |   |  |   |
| Partition coefficient n-octanc        | l / water (log  | Kow)   |   |
| Acetone                               |   | -0.24  |   |
| RM Ethanol; Ethyl Alcohol             |   | -0.31  |   |
| RM Ethylbenzene<br>RM N-butane        |   | 3.15<br>2.89   |   |
| RM N-butyl Acetate                    |   | 1.78   |   |
| RM Propane                            |   | 2.36   |   |
| bility in soil                        | No data a   | vailable.  |   |
| her adverse effects                   | The produ<br>potential.   | ct contains volatile organic compounds which   | have a photochemical ozone creation   |
| B. Disposal consideration             | s   |  |   |
| sposal instructions                   | container<br>conditions<br>waste, D0<br>regulation<br>Empty car | under pressure. Do not puncture, incinerate or<br>to hazardous or special waste collection point.<br>in an approved incinerator. If discarded, this p<br>01. Dispose of contents/container in accordan<br>s. Do not incinerate. Make sure containers are<br>ns completely and then puncture it with approv<br>unister may them be disposed of in normal tras | Incinerate the material under controlled<br>product is considered a RCRA ignitable<br>ce with local/regional/national/internatio<br>empty before discarding (explosion risk<br>ed device made for this purpose. The |
| cal disposal regulations              |   | accordance with all applicable regulations.  |   |
| zardous waste code                    | D001: Wa  | ste Flammable material with a flash point <140<br>code should be assigned in discussion betwe  |   |
| aste from residues / unused<br>oducts | product re  | f in accordance with local regulations. Empty of sidues. This material and its container must be nstructions).   |   |
| ntaminated packaging                  | emptied. E  | otied containers may retain product residue, fo<br>Empty containers should be taken to an approv<br>Do not re-use empty containers.  | -   |
| . Transport information               |   |  |   |
| DT                                    |   |  |   |
| · · · · · · ·                         |   |  |   |

UN number

UN1950

| UN proper shipping name         | Aerosols, flammable, (each not exceeding 1 L capacity), MARINE POLLUTANT (RM Ethanol;<br>Ethyl Alcohol, RM Xylene) |
|---------------------------------|--|
| Transport hazard class(es)      |  |
| Class                           | 2.1  |
| Subsidiary risk                 | -  |
| Label(s)                        | 2.1  |
| Packing group                   | -  |
| Environmental hazards           |  |
| Marine pollutant                | Yes  |
| Special precautions for user    | Read safety instructions, SDS and emergency procedures before handling.  |
| Special provisions              | N82  |
| Packaging exceptions            | 306  |
| Packaging non bulk              | None   |
| Packaging bulk                  | None   |
| ΙΑΤΑ                            |  |
| UN number                       | UN1950   |
| UN proper shipping name         | Aerosols, flammable  |
| Transport hazard class(es)      |  |
| Class                           | 2.1  |
| Subsidiary risk                 | -  |
| Packing group                   | -  |
| Environmental hazards           | Yes  |
| ERG Code                        | 10L  |
| Special precautions for user    | Read safety instructions, SDS and emergency procedures before handling.  |
| Other information               |  |
| Passenger and cargo<br>aircraft | Allowed with restrictions.   |
| Cargo aircraft only             | Allowed with restrictions.   |
| IMDG                            |  |
| UN number                       | UN1950   |
| UN proper shipping name         | AEROSOLS, MARINE POLLUTANT (RM Ethanol; Ethyl Alcohol, RM Xylene)  |
| Transport hazard class(es)      |  |
| Class                           | 2  |
| Subsidiary risk                 | -  |
| Packing group                   | -  |
| Environmental hazards           |  |
| Marine pollutant                | Yes  |
| EmS                             | F-D, S-U   |
| Special precautions for user    | Read safety instructions, SDS and emergency procedures before handling.  |
| RM Ethanol; Ethyl Alcohol       |  |
| RM Xylene                       |  |
|                                 |  |

# DOT



#### IATA; IMDG



Marine pollutant



IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

### 15. Regulatory information

**US** federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Toxic Substances Control Act (TSCA)

# TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

| Acetone (CAS 67-64-1)                   | Listed. |
|---|---------|
| RM Ethanol; Ethyl Alcohol (CAS 64-17-5) | Listed. |
| RM Ethylbenzene (CAS 100-41-4)          | Listed. |
| RM N-butane (CAS 106-97-8)              | Listed. |
| RM N-butyl Acetate (CAS 123-86-4)       | Listed. |
| RM Propane (CAS 74-98-6)                | Listed. |
| RM Xylene (CAS 1330-20-7)               | Listed. |
| 24.204 Emergency release notification   |         |

### SARA 304 Emergency release notification

Not regulated.

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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
```

Not listed.

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

| SARA 311/312 Hazardous chemical | Yes  |
|---------------------------------|--|
| Classified hazard categories    | Flammable (gases, aerosols, liquids, or solids)<br>Acute toxicity (any route of exposure)<br>Skin corrosion or irritation<br>Serious eye damage or eye irritation<br>Carcinogenicity<br>Specific target organ toxicity (single or repeated exposure) |

# SARA 313 (TRI reporting) Chemical name

| <br>Chemical name   | CAS number | % by wt. |
|---------------------|------------|----------|
| <br>RM Ethylbenzene | 100-41-4   | ≤ 1      |

| Chemical name                                      | CAS number                   | % by wt.                 |
|--|------------------------------|--------------------------|
| RM Xylene  | 1330-20-7                    | 1 - 2                    |
| federal regulations                                |                              |                          |
| Clean Air Act (CAA) Section 112 Hazardous Air Po   | ollutants (HAPs) List        |                          |
| RM Ethylbenzene (CAS 100-41-4)                     |                              |                          |
| RM Xylene (CAS 1330-20-7)                          |                              |                          |
| Clean Air Act (CAA) Section 112(r) Accidental Rele | ease Prevention (40 CFR (    | 68.130)                  |
| RM N-butane (CAS 106-97-8)                         |                              |                          |
| RM Propane (CAS 74-98-6)                           |                              |                          |
| Safe Drinking Water Act Contains compone SDWA)     | ent(s) regulated under the S | Safe Drinking Water Act. |
| Drug Enforcement Administration (DEA). List 2      | 2, Essential Chemicals (21   | CFR 1310.02(b) and 131   |
| Acetone (CAS 67-64-1)                              |                              |                          |
| DEA Essential Chemical Code Number                 |                              |                          |
| Acetone (CAS 67-64-1)                              | 6532                         |                          |
| Drug Enforcement Administration (DEA). List        | 1 & 2 Exempt Chemical Mi     | xtures (21 CFR 1310.12(  |
| Acetone (CAS 67-64-1)                              | 35 %WV                       |                          |
| DEA Exempt Chemical Mixtures Code Numbe            | r                            |                          |
| Acetone (CAS 67-64-1)                              | 6532                         |                          |
| FEMA Priority Substances Respiratory Health        | and Safety in the Flavor M   | Ianufacturing Workplace  |
| Acetone (CAS 67-64-1)                              | Low priority                 |                          |
| RM Ethanol; Ethyl Alcohol (CAS 64-17-5)            | Low priority                 |                          |
|  |                              |                          |
| RM N-butyl Acetate (CAS 123-86-4)                  | Low priority                 |                          |

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Acetone (CAS 67-64-1) RM Ethylbenzene (CAS 100-41-4) RM N-butane (CAS 106-97-8) RM Xylene (CAS 1330-20-7)

### **California Proposition 65**

**WARNING:** This product can expose you to chemicals including RM Ethanol; Ethyl Alcohol, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

### California Proposition 65 - CRT: Listed date/Carcinogenic substance

| RM Ethanol; Ethyl Alcohol (CAS 64-17-5)                          | Listed: April 29, 2011  |  |
|--|-------------------------|--|
|  | Listed: July 1, 1988    |  |
| RM Ethylbenzene (CAS 100-41-4)                                   | Listed: June 11, 2004   |  |
| California Proposition 65 - CRT: Listed date/Developmental toxin |                         |  |
| RM Ethanol; Ethyl Alcohol (CAS 64-17-5)                          | Listed: October 1, 1987 |  |

# 16. Other information, including date of preparation or last revision

| Issue date    | 04-12-2021 |
|---------------|------------|
| Revision date | 04-16-2024 |
| Version #     | 02         |

| Further information  | Transportation Emergency   |
|----------------------|--|
|                      | Call Chemtrec at:  |
|                      | US: 800.424.9300   |
|                      | International: 703.741.5970  |
|                      | Spain: 900.868.538   |
|                      | Switzerland: 0800.564.402  |
|                      | Chemtrec's toll free, mobile-enabled number in Germany – 0800 1817059  |
|                      | South Korea Toll-free Number – 080-880-0468  |
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| Revision information | This document has undergone significant changes and should be reviewed in its entirety.  |