

# SAFETY DATA SHEET

### 1. Identification

| Product identifier                                     | Allwrite Maintenance Spray      |  |
|--|---------------------------------|--|
| Other means of identification                          |                                 |  |
| SDS number   | 52 Rev. F                       |  |
| Product code   | 900-0085-01                     |  |
| Recommended use  | Inkjet Ink.                     |  |
| Recommended restrictions                               | None known.                     |  |
| Manufacturer/Importer/Supplier/Distributor information |                                 |  |
| Supplier   |                                 |  |
| Company Name   | Trident, an ITW Company         |  |
| Address  | 1114 Federal Road               |  |
|  | Brookfield, CT 06804-1140       |  |
| Telephone  | 1-203-740-9333                  |  |
| Fax  | 1-203-775-9660                  |  |
| Contact person   | HSE Manager                     |  |
| E-mail   | mailto: SDS@Trident-ITW.com     |  |
| Emergency telephone                                    | Infotrac 800-535-5053 (US only) |  |
| number   | International +1-352-323-3500   |  |

## 2. Hazard(s) identification

| Physical hazards     | Flammable liquids                 | Category 4  |
|----------------------|-----------------------------------|-------------|
| Health hazards       | Serious eye damage/eye irritation | Category 2A |
| OSHA defined hazards | Not classified.                   |             |
| Label elements       |                                   |             |



| Signal word                                  | Warning  |
|--|--|
| Hazard statement                             | Combustible liquid. Causes serious eye irritation.   |
| Precautionary statement                      |  |
| Prevention                                   | Keep away from heat/sparks/open flames/hot surfaces No smoking. Wash thoroughly after handling. Wear protective gloves/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 eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. |
| Storage                                      | Store in a well-ventilated place. Keep cool.   |
| Disposal                                     | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| Hazard(s) not otherwise<br>classified (HNOC) | None known.  |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                        | CAS number | %   |
|--------------------------------------|------------|-----|
| Diethylene glycol monoethyl<br>ether | 111-90-0   | 100 |

### 4. First-aid measures

| Inhalation   | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.<br>Call a physician if symptoms develop or persist.  |
|--|---|
| Skin contact   | Rinse skin with water/shower. Get medical attention if irritation develops and persists.  |
| 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. Get medical attention if irritation develops and persists. |
| Ingestion  | Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.   |
| Most important<br>symptoms/effects, acute and<br>delayed                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.   |
| Indication of immediate<br>medical attention and special<br>treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| General information  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  |
| 5. Fire-fighting measures  |   |

| Suitable extinguishing media                                     | Alcohol resistant foam. Water fog. Dry chemical 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                       | The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. Carbon monoxide and carbon dioxide. |
| Special protective equipment<br>and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| Fire fighting<br>equipment/instructions                          | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.   |
| Specific methods   | Use standard firefighting procedures and consider the hazards of other involved materials.   |
| General fire hazards   | Combustible liquid.  |

### 6. Accidental release measures

| Personal precautions,<br>protective equipment and<br>emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|---|--|
| Methods and materials for<br>containment and cleaning up                  | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.  |
|   | Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  |
|   | Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  |
|   | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.  |
| Environmental precautions   | Avoid discharge into drains, water courses or onto the ground.   |
| 7. Handling and storage   |  |
| Precautions for safe handling   | Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke.<br>Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear<br>appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in<br>handling/storage.  |
| Conditions for safe storage,<br>including any incompatibilities           | Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight.<br>Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped<br>with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).   |

### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

#### US. Workplace Environmental Exposure Level (WEEL) Guides

| Components                                       | Туре   | Value   |
|--|--|---|
| Diethylene glycol monoethyl ether (CAS 111-90-0) | TWA  | 140 mg/m3   |
|  |  | 25 ppm  |
| Biological limit values                          | No biological exposure limits noted  | for the ingredient(s).  |
| Appropriate engineering controls                 | Good general ventilation (typically 10 air changes per hour) 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. |   |
| Individual protection measures,                  | such as personal protective equip  | nent  |
| Eye/face protection                              | Wear safety glasses with side shield   | ds (or goggles).  |
| Skin protection                                  |  |   |
| Hand protection                                  | Wear appropriate chemical resistan   | t gloves.   |
| Other  | Wear suitable protective clothing.   |   |
| Respiratory protection                           | <b>.</b> .   | ain airborne concentrations below recommended exposure ceptable level (in countries where exposure limits have not pirator must be worn.      |
| Thermal hazards                                  | Wear appropriate thermal protective  | e clothing, when necessary.   |
| General hygiene<br>considerations                |  | observe good personal hygiene measures, such as washing<br>re eating, drinking, and/or smoking. Routinely wash work<br>o remove contaminants. |

#### 9. Physical and chemical properties

| Appearance  |  |
|---|--|
| Physical state  | Liquid.  |
| Form  | Liquid.  |
| Color   | Clear colorless.   |
| Odor  | Mild.  |
| Odor threshold  | Not available.   |
| рН  | 7.2  |
| Melting point/freezing point  | -104.8 °F (-76 °C)   |
| Initial boiling point and boiling range   | 394.88 °F (201.6 °C) estimated   |
| Flash point   | 181.9 °F (83.3 °C) Pensky-Martens Closed Cup   |
| Evaporation rate  | 0.01 (N-butyl acetate = 1) estimated   |
| Flammability (solid, gas)   | Not applicable.  |
| Upper/lower flammability or explosive limits  |  |
|   |  |
| Flammability limit - lower<br>(%)   | 1.2 at 275°F   |
| -   | 1.2 at 275°F<br>23.5 at 360°F  |
| (%)<br>Flammability limit - upper   |  |
| (%)<br>Flammability limit - upper<br>(%)  | 23.5 at 360°F  |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)   | 23.5 at 360°F<br>Not available.  |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)<br>Explosive limit - upper (%)  | 23.5 at 360°F<br>Not available.<br>Not available.  |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)<br>Explosive limit - upper (%)<br>Vapor pressure  | 23.5 at 360°F<br>Not available.<br>Not available.<br>0.08 mm Hg at 20°C estimated  |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)<br>Explosive limit - upper (%)<br>Vapor pressure<br>Vapor density   | <ul> <li>23.5 at 360°F</li> <li>Not available.</li> <li>Not available.</li> <li>0.08 mm Hg at 20°C estimated</li> <li>4 (Air=1)</li> </ul> |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)<br>Explosive limit - upper (%)<br>Vapor pressure<br>Vapor density<br>Relative density                                 | 23.5 at 360°F<br>Not available.<br>Not available.<br>0.08 mm Hg at 20°C estimated<br>4 (Air=1)<br>0.99 g/cm3                               |
| (%)<br>Flammability limit - upper<br>(%)<br>Explosive limit - lower (%)<br>Explosive limit - upper (%)<br>Vapor pressure<br>Vapor density<br>Relative density<br>Relative density temperature | 23.5 at 360°F<br>Not available.<br>Not available.<br>0.08 mm Hg at 20°C estimated<br>4 (Air=1)<br>0.99 g/cm3                               |

| Partition coefficient<br>(n-octanol/water) | Not available. |
|--|----------------|
| Auto-ignition temperature                  | Not available. |
| Decomposition temperature                  | Not available. |
| Viscosity                                  | 3.8 cP         |
| Viscosity temperature                      | 77 °F (25 °C)  |
| Other information                          |                |
| Percent volatile                           | 100 %          |

### 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 | No dangerous reaction known under conditions of normal use.   |
| Conditions to avoid                   | Do not evaporate to dryness. Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials                | Strong oxidizers, strong acids, and strong bases.   |
| Hazardous decomposition<br>products   | Carbon monoxide. Carbon dioxide.  |

### 11. Toxicological information

#### Information on likely routes of exposure

| Inhalation   | High mist concentrations may cause irritation of respiratory tract. Prolonged inhalation may be harmful. |
|--|--|
| Skin contact   | Prolonged or repeated contact may dry skin and cause irritation.   |
| Eye contact  | Causes serious eye irritation.   |
| Ingestion  | May cause discomfort if swallowed. Expected to be a low ingestion hazard.                                |
| Symptoms related to the physical, chemical and toxicological characteristics | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.    |

#### Information on toxicological effects

#### Acute toxicity

| Components                | Species                  | Test Results         |  |
|---------------------------|--------------------------|----------------------|--|
| Diethylene glycol monoeth | nyl ether (CAS 111-90-0) |                      |  |
| Acute                     |                          |                      |  |
| Dermal                    |                          |                      |  |
| LD50                      | Rabbit                   | 9143 mg/kg, 24 Hours |  |
| Oral                      |                          |                      |  |
| LD50                      | Rat                      | 10502 mg/kg          |  |
|                           |                          |                      |  |

\* Estimates for product may be based on additional component data not shown.

| Prolonged skin contact may cause temporary irritation.   |  |
|--|--|
| Causes serious eye irritation.   |  |
|  |  |
| n Not a respiratory sensitizer.  |  |
| This product is not expected to cause skin sensitization.  |  |
| No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |  |
| This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |  |
| d Substances (29 CFR 1910.1001-1050)   |  |
|  |  |
| This product is not expected to cause reproductive or developmental effects.                                     |  |
|  |  |

| Specific target organ toxicity - single exposure               | Not classified.  |  |  |
|--|--|--|--|
| Specific target organ toxicity -<br>repeated exposure          | Not classified.  |  |  |
| Aspiration hazard  | Not an aspiration hazard.  |  |  |
| Chronic effects  | Prolonged inhalation may be harmful.   |  |  |
| 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. |  |  |
| Persistence and degradability                                  | No data is available on the degradability of this product.   |  |  |
| Bioaccumulative potential                                      |  |  |  |
| Partition coefficient n-octan<br>Diethylene glycol monoethyl e |  |  |  |
| Mobility in soil   | This product is water soluble and may disperse in soil.  |  |  |
| Other adverse effects  | None known.  |  |  |
| 13. Disposal considerations                                    |  |  |  |
| Disposal instructions  | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of<br>contents/container in accordance with local/regional/national/international regulations.        |  |  |
| Local disposal regulations                                     | Dispose in accordance with all applicable regulations.   |  |  |
| Hazardous waste code   | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |  |  |
| Waste from residues / unused<br>products                       | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:           |  |  |

Contaminated packagingDisposal instructions).Contaminated packagingEmpty containers should be taken to an approved waste handling site for recycling or disposal.<br/>Since emptied containers may retain product residue, follow label warnings even after container is<br/>emptied.

#### 14. Transport information

|--|

| UN number                    | NA1993  |
|------------------------------|---|
| UN proper shipping name      | COMBUSTIBLE LIQUID, N.O.S. (Diethylene glycol monoethyl ether)  |
| Transport hazard class(es)   |   |
| Class                        | Combustible Liquid  |
| Subsidiary risk              | -   |
| Packing group                | III   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less. |
| Special provisions           | IB3, T1, T4, TP1  |
| Packaging exceptions         | 150   |
| Packaging non bulk           | 203   |
| Packaging bulk               | 241   |
|                              |   |

#### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

Transport in bulk according to<br/>Annex II of MARPOL 73/78 and<br/>the IBC CodeNot established.

### 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

| OSHA Specifically Pogul                       | ated Substances (29 CFR 191  | 0 1001-1050)           |                            |                        |
|---|--|------------------------|----------------------------|------------------------|
| Not listed.                                   | aleu Substances (29 CFR 191  | 0.1001-1030)           |                            |                        |
|   | stance List (40 CFR 302.4)   |                        |                            |                        |
|   | oethyl ether (CAS 111-90-0)  | LISTED                 |                            |                        |
| Superfund Amendments and                      | Reauthorization Act of 1986 (  | SARA)                  |                            |                        |
| Hazard categories                             | Immediate Hazard - Yes<br>Delayed Hazard - No<br>Fire Hazard - Yes<br>Pressure Hazard - No<br>Reactivity Hazard - No | ,                      |                            |                        |
| SARA 302 Extremely haz<br>Not listed.         | ardous substance   |                        |                            |                        |
| SARA 311/312 Hazardous chemical               | <b>s</b> Yes   |                        |                            |                        |
| SARA 313 (TRI reporting)<br>Chemical name     | )  | CAS number             | % by wt.                   |                        |
| Diethylene glycol mon                         | oethyl ether   | 111-90-0               | 100                        |                        |
| Other federal regulations                     |  | 111 30 0               | 100                        |                        |
| •   | ion 112 Hazardous Air Polluta  | unts (HAPs) List       |                            |                        |
| · · ·   | oethyl ether (CAS 111-90-0)  |                        |                            |                        |
| , ,,  | ion 112(r) Accidental Release  | Prevention (40 CFR     | 68.130)                    |                        |
| Not regulated.                                |  |                        |                            |                        |
| Safe Drinking Water Act<br>(SDWA)             | Not regulated.   |                        |                            |                        |
| US state regulations                          |  |                        |                            |                        |
| US. Massachusetts RTK                         | - Substance List   |                        |                            |                        |
| Not regulated.<br>US. New Jersey Worker a     | and Community Right-to-Know  | w Act                  |                            |                        |
| US. Pennsylvania Worke                        | oethyl ether (CAS 111-90-0)<br>r and Community Right-to-Kn   | ow Law                 |                            |                        |
| Diethylene glycol mon<br>US. Rhode Island RTK | oethyl ether (CAS 111-90-0)  |                        |                            |                        |
| Diethylene glycol mon                         | oethyl ether (CAS 111-90-0)  |                        |                            |                        |
|   | n 65<br>ng Water and Toxic Enforcemen<br>ly listed as carcinogens or repro   |                        | tion 65): This material is | not known to contain   |
| International Inventories                     |  |                        |                            |                        |
| Country(s) or region                          | Inventory name   |                        |                            | On inventory (yes/no)* |
| Australia                                     | Australian Inventory of Che  |                        | ICS)                       | Yes                    |
| Canada  | Domestic Substances List   |                        |                            | Yes                    |
| Canada  | Non-Domestic Substances  | . ,                    | . ((5000)                  | No                     |
| China   | Inventory of Existing Chem   |                        | . ,                        | Yes                    |
| Europe  | European Inventory of Exis<br>Substances (EINECS)  | C C                    |                            | Yes                    |
| Europe  | European List of Notified C  | Chemical Substances    | (ELINCS)                   | No                     |
| Japan   | Inventory of Existing and N  |                        | nces (ENCS)                | Yes                    |
| Korea   | Existing Chemicals List (E   | CL)                    |                            | Yes                    |
| New Zealand                                   | New Zealand Inventory  |                        |                            | Yes                    |
| Philippines                                   | Philippine Inventory of Che<br>(PICCS)   |                        | Substances                 | Yes                    |
| United States & Puerto Ric                    |  |                        |                            | Yes                    |
| "A "Yes" indicates this produc                | t complies with the inventory require  | ements administered by | the doverning country(s)   |                        |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

| Issue date    |  |  |
|---------------|--|--|
| Revision date |  |  |
| Version #     |  |  |
| HMIS® ratings |  |  |

**NFPA** ratings

25-March-2015

01 Health: 2 Flammability: 2 Physical hazard: 0



Disclaimer

Trident an ITW Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.