# MATERIAL SAFETY DATA SHEET

## Section 1 Product Identification

| | |
|---|---|
| 1.1 | Product Name: Dunelm Heavy Duty Adhesive |
| 1.2 | Chemical Name: N/A |
| 1.3 | Article number and barcode: 30076131 / 5 038471 001177 |
| 1.4 | |
| 1.5 | Product use: Adhesive |
| | |
| | |
| 1.8 | Emergency Phone: UK +44 (0) 1623 722661 (Mon-Fri; 09:00-17:00) |
| 1.9 | Other: Fax: 01623885971 |

## Section 2 Hazard Identification

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 | Hazard Identification: Physical hazards: Aerosol 1 - H222, H229<br>Health hazards: Skin Irrit. 2 - H315, Eye Irrit. 2 - H319 STOT SE 3 - H336<br>Environmental hazards: Aquatic Chronic 3 - H412 | | | | | | |
| 2.2 | Routes of entry | Inhalation | X | Absorption | X | Ingestion | X |
| 2.3 | Effects of exposure<br>Ingestion: There may be soreness and redness of the mouth and throat.<br>Eyes: There may be irritation and redness. Eyes may water profusely. Irritating to eyes.<br>Skin: Prolonged contact may cause redness, irritation and dry skin. Inhalation: Coughing, chest tightness, feeling of chest pressure. Exposure may cause coughing or wheezing. | | | | | | |
| 2.4 | Symptoms of Over exposure<br>Ingestion: Stomach pain.<br>Eyes: Causes irritation.<br>Skin: Product has a defatting effect on skin.<br>Inhalation: In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. | | | | | | |
| 2.5 | Acute Health Effects<br>Ingestion: There may be soreness and redness of the mouth and throat.<br>Eyes: There may be irritation and redness.<br>Skin: Redness and irritation<br>Inhalation: Exposure may cause coughing or wheezing. | | | | | | |
| 2.6 | Chronic Health Effects: Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Frequent inhalation of vapours may cause respiratory allergy. | | | | | | |
| 2.7 | Target organs: Central Nervous System, Respiratory System, Lungs, Skin | | | | | | |
| 2.8 | Toxicological Properties:<br>Petroleum Gases, Liquefied; Petroleum Gas; STOT - single exposure: Gas or vapour is harmful on prolonged exposure or in high concentrations. High concentrations may be fatal. | | | | | | |

| | |
|---|---|
| | Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; Aspiration hazard: May be fatal if swallowed and enters airways. |

NA= Not Available ND= Not Determined NE= Not Established NF = Not Found C= Celling Limit

# MATERIAL SAFETY DATA SHEET

## Section 3 Composition & Ingredient Information

| Chemical Name(s) | CAS No. | RTECs No. | EINECS No. | % | Exposure Limits in Air (mg/m2) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ACGIH | | NOHSC | | | OSHA | | | Other |
| | | | | | ppm | | ppm | | | ppm | | | |
| | | | | | TLV | STEL | ES-TWA | ES-STEL | ES-PEAK | TLV | STEL | IDLH | |
| Petroleum Gases, Liquefied; Petroleum Gas | 68476-85-7 | N/A | 270-704-2 | 30-60 | NA | NA | 1000 | NA | NA | NA | NA | 2,000 | |
| Acetone | 67-64-1 | N/A | 200-662-2 | 10-30 | 250 | 500 | 500 | 1000 | NA | NA | 750 | 2,500 | |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% nhexane | - | N/A | 921-024-6 | 10-30 | NA | NA | NA | NA | NA | NA | NA | | |

## Section 4 First Aid Measures

| | |
|---|---|
| 4.1 | Frist Aid:<br>Ingestion: Rinse mouth thoroughly with water. Get medical attention. Do not induce vomiting.<br>Eyes: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. If adhesive bonding occurs, do not force eyelids apart.<br>Skin: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.<br>Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. If breathing stops, provide artificial respiration. Get medical attention immediately. |
| 4.2 | Medical Conditions aggravated by expose: Asthma |

## 5. Firefighting Measures

| | | | | | |
|---|---|---|---|---|---|
| 5.1 | Flashpoint & method: A flash point method is not available but the major hazardous component, the propellant has a flash point of <-60°C with flammability limits of 10.9% vol. upper and 1.4% vol. lower. | | | | |
| 5.2 | Auto-ignition Temperature: Not available | | | | |
| 5.3 | Flammability limits | Lower explosive limit (LEL) | 1.4% | Upper explosive limit (UEL) | 10.9% |
| 5.4 | Extinguishing methods: Water spray, dry powder or carbon dioxide. Alcohol-resistant foam. Do not use water jet as an extinguisher, as this will spread the fire. | | | | |
| 5.5 | Firefighting Procedures: Use water to keep fire exposed containers cool and disperse vapours. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control runoff water by containing and keeping it out of sewers and watercourses.<br>Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. | | | | |
| Additional information: | | | | | |



## Section 6. Accidental release measures

| | |
|---|---|
| 6.1 | Spills: Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid water contacting spilled material or leaking containers. Approach the spillage from upwind. Take precautionary measures against static discharge. Use only non-sparking tools. |
| 6.2 | Any other forms of release: Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. |

## Section 7. Handling &storage information

| | |
|---|---|
| 7.1 | Work & Hygiene practices: Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Wash after use and before eating, smoking and using the toilet. Do not smoke in work area. Clean equipment and the work area every day. |
| 7.2 | Storage & handling: Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents. Store away from the following materials: Alkalis. |
| 7.3 | Special precautions: Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Wear protective clothing as described in Section 8 of this safety data sheet. Read and follow manufacturer's recommendations. Do not use in confined spaces without adequate ventilation and/or respirator. |

| | |
|---|---|
| 7.4 | Additional information: |

## Section 8. Exposure controls & personal protection

| | |
|---|---|
| 8.1 | Ventilation & engineering controls: Provide adequate ventilation. Ensure that the direction of airflow is clearly away from the worker. Use approved respirator if air contamination is above an acceptable level. Observe any occupational exposure limits for the product or ingredients. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof electrical, ventilating and lighting equipment. Ensure operatives are trained to minimise exposure. |
| 8.2 | Respiratory protection: If ventilation is inadequate, suitable respiratory protection must be worn. In confined or poorly ventilated spaces, a supplied-air respirator must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. For short term use an AX filter is recommended. |
| 8.3 | Eye protection: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166. |
| 8.4 | Hand protection: To protect hands from chemicals, gloves should comply with European Standard EN374.<br>Laminate (PE/PA/PE), 2.5mil (0.06mm), >480 min. Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. |
| 8.5 | Body protection:<br><br>In case of inadequate ventilation a mask may need to be provided. |

| | |
|---|---|
| **HEALTH** | **2** |
| **FLAMMABILITY** | **4** |
| **PHYSCIAL HAZARDS** | **3** |
| **SPECIAL EQUIPMENT** | **C** |



## Section 9. Physical & chemical properties

| | | |
|---|---|---|
| 9.1 | Density | 0.84 @ 20°C for liquid base |
| 9.2 | Boiling point | 55.8-56.6°C @ 760 mm Hg. Boiling point for Acetone. 75-93°C @ 760 mm Hg. Boiling point of Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclics. |
| 9.3 | Melting point | Not available |
| 9.4 | Evaporation rate | Not available |
| 9.5 | Vapour pressure | 4-6 bar |
| 9.6 | Molecular weight | Not applicable |
| 9.7 | Appearance & colour | Liquid. Spray. |
| 9.8 | Odour threshold | Not available |
| 9.9 | Solubility | Not miscible with water |
| 9.10 | pH | Not available |
| 9.11 | Viscosity | 50-150cP @ 20°C |
| 9.12 | Other information | This product contains a maximum VOC content of |

| | | |
|---|---|---|
| | | 544 g/l. |

## Section 10. Stability & reactivity

| | |
|---|---|
| 10.1 | Stability: Stable at normal ambient temperatures and when used as recommended. Highly volatile. |
| 10.2 | Hazardous Decomposition products: Oxides of carbon. Will not decompose when stored at ambient temperature in recommended conditions. |
| 10.3 | Hazardous polymerization: Will not polymerise |
| 10.4 | Conditions to avoid: Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Avoid the accumulation of vapours in low or confined areas. |
| 10.5 | Incompatible substances: Strong acids. Strong oxidising agents. Strong alkalis. |

## Section 11. toxicological information

| | | |
|---|---|---|
| 11.1 | Toxicity data:<br>Mixture: | |
| 11.2 | Acute toxicity: Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Frequent inhalation of vapours may cause respiratory allergy. | |
| 11.3 | Chronic toxicity: Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Frequent inhalation of vapours may cause respiratory allergy. | |
| 11.4 | Suspected toxicity: Low | |
| 11.5 | Reproductive toxicity: Not classified | |
| | Mutagenicity: Not classified | |
| | Embryo toxicity: Not classified | |
| | Teratogenicity: Not classified | |
| | Reproductive toxicity: Not classified | |
| 11.6 | Irritancy of product: Irritating to skin and eyes | |
| 11.7 | Biological exposure indices: Not available | |
| 11.8 | Physician recommendations: Show this safety data sheet to the doctor in attendance. The following symptoms may occur: Nausea, headache, dizziness, coughing and breathing difficulty. If adhesive bonding occurs, do not force eyelids apart. | |
| 11.9 | Additional information | |



## Section 12. Ecological information

| | |
|---|---|
| 12.1 | Environmental stability: Readily absorbed into soil. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. This product does not contain any substances classified as PBT or vPvB. |

| | |
|---|---|
| 12.2 | Effect on plants & animals: Not available |
| 12.3 | Effect on aquatic life: The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. |

## Section 13. Disposal consideration

| | |
|---|---|
| 13.1 | Waste Disposal: Full or Partially Empty Aerosol: 16 05 04, Empty Aerosol: 15 01 10 (Containing hazardous residues). Empty Aerosol: 15 01 04 (No hazardous residues). |
| 13.2 | Special Considerations: Do not puncture or incinerate, even when empty. Avoid the spillage or runoff entering drains, sewers or watercourses. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. |

## Section 14. Transportation information

| The basic description (ID number, proper shipping name, hazard class & division, packing group) is shown for each mode of transport. Additional descriptive information may be required by 49 CFR. IATA/ICAO, IMDG, TDGR, SCT and ADGR | | |
|---|---|---|
| 14.1 | **49 CFR (GND):** Not known | |
| 14.2 | **IATA (AIR):** UN1950, AEROSOLS, hazard class 2.1, packing group not applicable | |
| 14.3 | **IMDG (OCN):** UN1950, AEROSOLS, hazard class 2.1, packing group not applicable | |
| 14.4 | **TDGR (Canadian GND):** UN1950, AEROSOLS, hazard class 2.1, packing group not applicable | |
| 14.5 | **ADR/RID (EU):** UN1950, AEROSOLS, hazard class 2.1, packing group not applicable | |
| 14.6 | **Mexico (SCT):** Not known | |
| 14.7 | **ADGR (AUS):** Not known | |

## Section 15. regulatory information

| | |
|---|---|
| 15.1 | U.S EPA SARA reporting requirements |
| 15.2 | U.S EPA SARA Threshold planning quantity |
| 15.3 | U.S EPA TSCA Inventory Status |
| 15.4 | U.S EPA CERCLA reportable quantity (RQ) |
| 15.5 | Other U.S Federal Requirements |
| 15.6 | Other regulations: The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).<br>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).<br>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). |
| 15.7 | U.S State regulatory Information |
| 15.8 | 67/548/EEC (European Union) and Australia NOHSC:2011 (2003) requirements |

| | |
|---|---|
| Dunelm | **MATERIAL SAFETY DATA SHEET** |

## Section 16. Other information

| | |
|---|---|
| 16.1 | Other information: |
| 16.2 | Terms & definitions: Please refer to last page. |
| 16.3 | Disclaimers: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. |
| 16.4 | Prepared for: |
| 16.5 | Company full address: |
| | |

| | |
|---|---|
| Dunelm | **MATERIAL SAFETY DATA SHEET** |

## Definitions of terms

**A large number of abbreviation and acronyms appear on a MSDS. Some of these that are commonly used include the following:**

| | |
|---|---|
| **General information** | |
| **CAS No.** | Chemical abstract service number |
| **Exposure limits in the air** | |
| **ACGIH** | American conference on governmental industrial hygienists |
| **TLV** | Threshold limit value |
| **OSHA** | U.S occupational safety and health administration |
| **PEL** | Permissible exposure limit |
| **IDLH** | Immediately dangerous to life and health |
| **Frist Aid measures** | |
| **CPR** | Cardiopulmonary resuscitation- method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body. |

**Hazardous materials identification systems: HMISH**

**Health, Flammability & reactivity ratings**

| | |
|---|---|
| **0** | Minimal Hazard |
| **1** | Slight Hazard |
| **2** | Moderate Hazard |

| | |
|---|---|
| | Hazard rating |
| **HEALTH** | |

| | | | |
|---|---|---|---|
| **3** | Severe Hazard | **FLAMMABILITY** | |
| **4** | Extreme Hazard | **PHYSICAL HAZARDS** | |
| | | Personal Protection | |

**Personal Protection Ratings:**

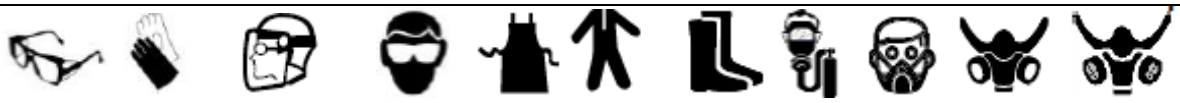
| | | | |
|---|---|---|---|
| **A** |  | **G** |  |
| **B** |  | **H** |  |
| **C** |  | **I** |  |
| **D** |  | **J** |  |
| **E** |  | **K** |  |
| **F** |  | **X** | **Consult your supervisor or S.O.P for special handling directions.** |

# MATERIAL SAFETY DATA SHEET

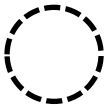
## Definitions of terms

**A large number of abbreviation and acronyms appear on a MSDS. Some of these that are commonly used include the following:**

## Personal Protection ratings:



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Saftey glasses** | **Gloves** | **Face shield &eye protection** | **Splash goggles** | **Synthetic Apron** | **Full suit** | **Boots** | **Airline Hood/ mask** | **Full face respirator** | **Vapor respirator** | **Dust & vapor respirator** |



Note: The dotted circle indicates that this respiratory protective equipment is required for high concentrations or for large volume spills or releases of product.

| **Flammability limits in air** | |
|---|---|
| **Auto ignition temperature** | Minimum temperature required to initiate combustion in air with no other source of ignition. |
| **LEL** | Lower explosive limit- lowest percent of vapour in air, by volume that will explode |

| | |
|---|---|
| | or ignite in the presence of an ignition source. |
| **UEL** | Upper explosive limit- highest percent of vapour in air, by volume, that will explode or ignite in the presence of an ignition source. |

| **Other Standard abbreviations:** | |
|---|---|
| **NA** | Not available |
| **NR** | No results |
| **NE** | Not established |
| **NF** | Not found |
| **ND** | Not determined |
| **ML** | Maximum limit |
| **SCBA** | Self- contained breathing apparatus |

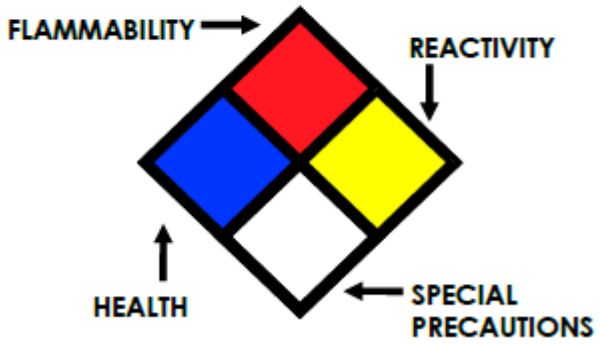
# MATERIAL SAFETY DATA SHEET

## Definitions of terms

**A large number of abbreviation and acronyms appear on a MSDS. Some of these that are commonly used include the following:**

### National fire protection association: NFPA Hazard ratings

| | |
|---|---|
| **0** | Minimal Hazard |
| **1** | Slight Hazard |
| **2** | Moderate Hazard |
| **3** | Severe Hazard |
| **4** | Extreme Hazard |
| **ACD** | Acidic |
| **ALK** | Alkaline |
| **COR** | Corrosive |
| **W_** | Use no water |
| **OX** | Oxidizer |




| **Toxicological information** | |
|---|---|
| **LD 50** | Lethal dose (solids & liquids) which kills 50% of the exposed animals |
| **LC 50** | Lethal concentration (gases) which kills 50% of the exposed animals |
| **ppm** | Concentration expressed in parts of material per million parts |

| | |
|---|---|
| **$TD_{10}$** | Lowest dose to cause a symptom |
| **$TCL_0$** | Lowest concentration to cause a symptom |
| **$TD_{10}$, $LD_{10}$ & $LD_0$ or TC, $TC_0$, $LC_{10}$, & $LC_0$** | Lowest dose (or Concentration) to cause lethal or toxic effects |
| **IARC** | International agency for research on cancer |
| **NTP** | National toxicology program |
| **RTECS** | Registry of toxic effect chemical substances |
| **BCF** | Bio concentration factor |
| **$TL_m$** | Median threshold limit |
| **Log $K_{ow}$ or Log $K_{oc}$** | Coefficient of oil/water distribution |

# MATERIAL SAFETY DATA SHEET

## Definitions of terms

**A large number of abbreviation and acronyms appear on a MSDS. Some of these that are commonly used include the following:**

| **Regulatory information** | |
|---|---|
| **CPR** | Canada's controlled product regulations |
| **DOT** | U.S. Department of transport |
| **EPA** | U.S Environmental protection agency |
| **EU** | European Union (European union directive 67/548/EEC) |
| **DSL** | Canadian domestic substance list |
| **MAK** | Mandat und die arbeitsweise der commission (work ares commission) |
| **NDSL** | Canadian non- domestic substance list |
| **NOHSC** | National occupational health & safety code (Australia) |
| **PSL** | Canadian Priority substances list |
| **TC** | Transport Canada |
| **TSCA** | U.S toxic substance control act |
| **WHMIS** | Canadian workplace hazardous material information system |

| **EC Information** |
|---|

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| **C** | **E** | **F** | **N** | **O** | **T+** | **Xi** | **Xn** |
| Corrosive | Explosive | Flammable | Harmful | Oxidizing | Toxic | Irritant | Harmful |

## WHMIS Information

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| **A** | **B** | **C** | **D1** | **D2** | **D3** | **E** | **F** |
| Compressed | Flammable | Oxidizing | Toxic | Irritation | Infectious | Corrosive | Reactive |