| | | |
|---|---|---|
| **SAFETY DATA SHEET** | | Revision Date: 08/29/2019 |
| | | Print Date: 8/29/2019 |
| | | SDS Number: R0286506 |
| Pliogrip™ 7652 ADHESIVE<br>™ Trademark, Ashland or its subsidiaries, registered in various countries<br>120155 | | Version: 0.0 |

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

Trade name : Pliogrip™ 7652
ADHESIVE
™ Trademark, Ashland or its subsidiaries, registered in various countries

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

Recommended use : Adhesives

| | |
|---|---|
| **Details of the supplier of the safety data sheet**<br>Ashland<br>P.O. Box 2219<br>Columbus, OH 43216<br>United States of America (USA)<br>+1-614-790-3333<br><br>EHSProductSafety@ashland.com | **Emergency telephone number**<br>1-800-ASHLAND (1-800-274-5263)<br><br>**Regulatory Information Number**<br>1-614-790-3333<br><br>**Product Information**<br>+1-614-790-3333 |

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Reproductive toxicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Suspected of damaging fertility or the unborn child.

Precautionary Statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and

understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
**Response:**
IF exposed or concerned: Get medical advice/ attention.
**Storage:**
Store locked up.
**Disposal:**
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Hazardous components**

| Chemical name | CAS-No. | Classification | Concentration (%) |
|---|---|---|---|
| TALC | 14807-96-6 | This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012). | 22.731 |
| PIPERAZINE | 110-85-0 | Flam. Sol. 1; H228<br><br>Comb Dust<br>Skin Corr. 1B; H314<br><br>Eye Dam. 1; H318<br><br>Resp. Sens. 1B; H334<br><br>Skin Sens. 1B; H317<br><br>Repr. 2; H361 | 0.767 |

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| General advice | : | Move out of dangerous area.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended. |
| If inhaled | : | If unconscious, place in recovery position and seek medical advice.<br>If symptoms persist, call a physician. |
| In case of skin contact | : | First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. |
| In case of eye contact | : | Flush eyes with water as a precaution.<br>Remove contact lenses.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist. |
| If swallowed | : | Obtain medical attention.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician. |
| Most important symptoms and effects, both acute and delayed | : | The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or Section 11.<br>Suspected of damaging fertility or the unborn child. |
| Notes to physician | : | No hazards which require special first aid measures. |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Water spray<br>Foam<br>Carbon dioxide (CO2)<br>Dry chemical |
| Unsuitable extinguishing media | : | High volume water jet |
| Hazardous combustion products | : | Aldehydes<br>Carbon dioxide (CO2)<br>Carbon monoxide<br>Ketones<br>Nitrogen oxides (NOx)<br>Chlorine compounds<br>Halogenated hydrocarbons |
| Specific extinguishing methods | : | Product is compatible with standard fire-fighting agents. |
| Further information | : | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment | : | In the event of fire, wear self-contained breathing apparatus. |

for firefighters

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.<br>Ensure adequate ventilation.<br>Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. |
| Environmental precautions | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).<br>Keep in suitable, closed containers for disposal. |
| Other information | : | Comply with all applicable federal, state, and local regulations. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Do not breathe vapours/dust.<br>Do not smoke.<br>Container hazardous when empty.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>Smoking, eating and drinking should be prohibited in the application area.<br>For personal protection see section 8.<br>Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | : | Keep container tightly closed in a dry and well-ventilated place.<br>Observe label precautions. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| TALC | 14807-96-6 | TWA | 20 Million particles per cubic foot<br>Dust | OSHA Z-3 |
| | | TWA | 2 mg/m3 respirable dust fraction | OSHA P0 |
| | | TWA | 2 mg/m3 Respirable | NIOSH REL |
| | | PEL | 2 mg/m3 Respirable dust | CAL PEL |
| | | TWA | 0.1 fibres per cubic centimeter | ACGIH |
| | | TWA | 2 mg/m3 Respirable fraction | ACGIH |
| PIPERAZINE | 110-85-0 | TWA | 0.03 ppm Inhalable fraction and vapor (piperazine) | ACGIH |

**Hazardous components without workplace control parameters**

| Components | CAS-No. |
|---|---|
| PIPERAZINE | 110-85-0 |

**Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter within the capabilities of the respirator/filter combination.
Where concentrations are above recommended limits or are unknown, or a cartridge type respirator is not adequate, wear a positive-pressure supplied-air respirator.

Hand protection

Material : butyl-rubber

Break through time : 480 min

Glove thickness : > 0.5 mm

Remarks : The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed

| | | |
|---|---|---|
| | | into eyes. |
| Skin and body protection | : | Wear as appropriate:<br>Impervious clothing<br>Safety shoes<br>Choose body protection according to the amount and concentration of the dangerous substance at the work place.<br>Wear resistant gloves (consult your safety equipment supplier). |
| Hygiene measures | : | Wash hands before breaks and at the end of workday.<br>When using do not eat or drink.<br>When using do not smoke. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Physical state | : | liquid |
| Odour | : | No data available |
| Odour Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flash point | : | > 93.4 °C<br>Method: Seta closed cup |
| Evaporation rate | : | 1<br>Ethyl Ether = 1 |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | 3 hPa (25 °C)<br>Calculated Vapor Pressure |
| Relative vapour density | : | > 1(Air = 1.0) |
| Relative density | : | 1.225 (25 °C) |
| Density | : | 1.225 g/cm3 (20 °C) |
| Solubility(ies) | | |
| Water solubility | : | No data available |

| | | |
|---|---|---|
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Thermal decomposition | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Oxidizing properties | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No decomposition if stored and applied as directed. |
| Chemical stability | : | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | : | Product will not undergo hazardous polymerization. |
| Conditions to avoid | : | Heat<br>Exposure to moisture |
| Incompatible materials | : | alkalis<br>isocyanates<br>oxidizers<br>Phosphorus compounds<br>Strong acids<br>strong oxidizing agents |
| Hazardous decomposition products | | Carbon monoxide<br>Carbon dioxide (CO2)<br>Nitrogen oxides (NOx) |

## SECTION 11. TOXICOLOGICAL INFORMATION

| | | |
|---|---|---|
| Information on likely routes of exposure | : | Inhalation<br>Skin contact<br>Eye Contact<br>Ingestion |

**Acute toxicity**
Not classified based on available information.
**Components:**
TALC:

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |

Method: OECD Test Guideline 423

PIPERAZINE**:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): ca. 2,600 mg/kg<br>Method: OECD Test Guideline 401 |
| Acute inhalation toxicity | : | LC0 (Rat, male and female): 1.61 mg/l<br>Exposure time: 8 h<br>Test atmosphere: vapour |

**Skin corrosion/irritation**
Not classified based on available information.
**Components:**
TALC**:**
Species: reconstructed human epidermis (RhE)
Result: No skin irritation

PIPERAZINE**:**
Result: Corrosive after 3 minutes to 1 hour of exposure

**Serious eye damage/eye irritation**
Not classified based on available information.
**Product:**
Remarks: Unlikely to cause eye irritation or injury.

**Components:**
TALC**:**
Species: Rabbit
Result: Slight, transient irritation
Method: OECD Test Guideline 405

PIPERAZINE**:**
Result: Corrosive

**Respiratory or skin sensitisation**
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.
**Components:**
TALC**:**
Test Type: Maximisation Test
Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406

PIPERAZINE**:**

Assessment: The product is a respiratory sensitiser, sub-category 1B.

Assessment: The product is a skin sensitiser, sub-category 1B.

Germ cell mutagenicity
Not classified based on available information.
**Components:**
TALC**:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro gene mutation study in bacteria<br>Test species: Salmonella typhimurium<br>Metabolic activation: with and without metabolic activation<br>Result: negative |
| | : | Test Type: In vitro gene mutation study in bacteria<br>Test species: Saccharomyces cerevisiae<br>Metabolic activation: with and without metabolic activation<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: dominant lethal test<br>Test species: Rat (male)<br>Cell type: Bone marrow<br>Result: negative |

**Carcinogenicity**
Not classified based on available information.
**Reproductive toxicity**
Suspected of damaging fertility or the unborn child.
**Components:**
PIPERAZINE**:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments. |

**STOT - single exposure**
Not classified based on available information.
**STOT - repeated exposure**
Not classified based on available information.
**Aspiration toxicity**
Not classified based on available information.
**Further information**
**Product:**
Remarks: No data available

**Carcinogenicity:**

| | |
|---|---|
| **IARC** | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |

| | |
|---|---|
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. |
| **NTP** | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Product:**

Ecotoxicology Assessment

| | | |
|---|---|---|
| Short-term (acute) aquatic hazard | : | Not classified based on available information. |
| Long-term (chronic) aquatic hazard | : | Not classified based on available information. |

**Components:**

PIPERAZINE**:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Poecilia reticulata (guppy)): > 1,800 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 21 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202 |
| Toxicity to algae | : | EC50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 12.5 mg/l<br>Exposure time: 21 d<br>Method: OECD Test Guideline 211 |

**Persistence and degradability**

TALC**:**

| | | |
|---|---|---|
| Biodegradability | : | Result: The methods for determining biodegradability are not applicable to inorganic substances. |

PIPERAZINE**:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Biodegradation: 70 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301F |

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

General advice : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

## SECTION 14. TRANSPORT INFORMATION

**International transport regulations**

**REGULATION**

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|---|---|---|---|---|---|

**U.S. DOT - ROAD**

| |
|---|
| Not dangerous goods |
| |

**CFR_RAIL_C**

| |
|---|
| Not dangerous goods |
| |

**U.S. DOT - INLAND WATERWAYS**

| |
|---|
| Not dangerous goods |
| |

**TDG_ROAD_C**

| |
|---|
| Not dangerous goods |
| |

**TDG_RAIL_C**

| |
|---|
| Not dangerous goods |
| |

**TDG_INWT_C**

| |
|---|
| Not dangerous goods |
| |

**INTERNATIONAL MARITIME DANGEROUS GOODS**

| |
|---|
| Not dangerous goods |
| |

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

| |
|---|
| Not dangerous goods |
| |

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

| |
|---|
| Not dangerous goods |
| |

**MX_DG**

| |
|---|
| Not dangerous goods |
| |

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

| | | |
|---|---|---|
| Marine pollutant | | no |

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know Act**
**CERCLA Reportable Quantity**
This material does not contain any components with a CERCLA RQ.
**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Reproductive toxicity

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop. 65**

WARNING: This product can expose you to chemicals including Talc (powder), Quartz, Carbon black, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**The components of this product are reported in the following inventories:**

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

TSCA : On the inventory, or in compliance with the inventory

**Inventories**

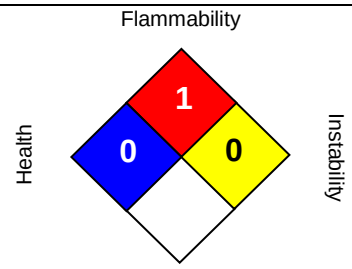
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

## SECTION 16. OTHER INFORMATION

**Further information**

Revision Date: 08/29/2019

| **NFPA:** | **HMIS III:** |
|---|---|




| | |
|---|---|
| HEALTH | |
| FLAMMABILITY | |
| PHYSICAL HAZARD | |

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

**NFPA Flammable and Combustible Liquids Classification**
Combustible Liquid Class IIIB

**Full text of H-Statements**

| | |
|---|---|
| H228 | Flammable solid. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H361 | Suspected of damaging fertility or the unborn child. |

Sources of key data used to compile the Safety Data Sheet
Ashland internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative