



## Material Safety Data Sheet

### 51073 - One Part Industrial Adhesive

#### 1. Product and company identification

|                              |  |
|------------------------------|--|
| <b>Common name</b>           | : 51073 - One Part Industrial Adhesive   |
| <b>Material uses</b>         | : Adhesive.  |
| <b>Supplier/Manufacturer</b> | : Fenner Dunlop<br>146 South Westwood<br>P. O. Box 441<br>Toledo, OH 43697<br>Tel : (419) 534 5300 ext. 324<br>Fax : (419) 531-6284<br>Email : Dan.hoca@fennerdunlop.com |
| <b>In case of emergency</b>  | : CHEMTREC, U.S. : (800) 424-9300 International: (703) 527-3887  |
| <b>MSDS authored by:</b>     | : Kemika XXI Inc. + 1-450-435-7475 09/15/2006  |

#### 2. Hazards identification

|   |  |
|---|--|
| <b>Physical state</b>                   | : Liquid.  |
| <b>Odor</b>                             | : Hydrocarbon. (Slight.)   |
| <b>Color</b>                            | : Black.   |
| <b>Hazard status</b>                    | : This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada and the NOM-018-STPS-2000 in Mexico.  |
| <b>Emergency overview</b>               | : DANGER !<br>EXTREMELY FLAMMABLE LIQUID AND VAPOR.<br>CANCER HAZARD.<br>CONTAINS MATERIAL WHICH CAN CAUSE CANCER.<br>CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.<br>CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:<br>RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.<br>VAPOR MAY CAUSE FLASH FIRE.<br>Avoid contact with skin and clothing. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure. |
| <b>Routes of entry</b>                  | : Dermal contact. Eye contact. Inhalation. Ingestion.  |
| <b>Potential acute health effects</b>   |  |
| <b>Eyes</b>                             | : Irritating to eyes.  |
| <b>Skin</b>                             | : Irritating to skin.  |
| <b>Inhalation</b>                       | : Irritating to respiratory system.  |
| <b>Ingestion</b>                        | : No known significant effects or critical hazards.  |
| <b>Potential chronic health effects</b> | : Carcinogenic effects Classified + (Proven.) by NIOSH [Carbon Black]. Classified 2B (Possible for humans.) by IARC [Carbon Black]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Carbon Black].<br>Mutagenic effects Not available.<br>Teratogenic effects Not available.   |

**Medical conditions aggravated by over-exposure** : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organ damage.

See toxicological information (section 11)

### 3 . Composition/information on ingredients

#### United States

| Name         | CAS number | %        |
|--------------|------------|----------|
| Heptane      | 142-82-5   | 60 - 100 |
| Carbon Black | 1333-86-4  | 1 - 5    |

#### Canada

| Name         | CAS number | %        |
|--------------|------------|----------|
| Heptane      | 142-82-5   | 60 - 100 |
| Carbon Black | 1333-86-4  | 1 - 5    |

#### Mexico

| Name         | UN number      | IDLH                   | Classification |   |   |           | CAS number | % |
|--------------|----------------|------------------------|----------------|---|---|-----------|------------|---|
|              |                |                        | H              | F | R | Special   |            |   |
| Heptane      | UN1206         | 750 ppm                | 1              | 3 | 0 | 142-82-5  | 60 - 100   |   |
| Carbon Black | Not regulated. | 1750 mg/m <sup>3</sup> | 2              | 0 | 0 | 1333-86-4 | 1 - 5      |   |

### 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

### 5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides.
- Extinguishing media**
  - Suitable** : Use dry chemical, carbon dioxide, water spray (fog) or foam.
  - Not suitable** : Do not use water jet.
- Special exposure hazards** : Extremely flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.
- Environmental precautions** : Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

## 7 . Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## 8 . Exposure controls/personal protection

### United States

**Product name**

Heptane

**Exposure limits**

**ACGIH TLV (United States, 1/2005).**

STEL: 2050 mg/m<sup>3</sup> 15 minute(s). Form: All forms.

STEL: 500 ppm 15 minute(s). Form: All forms.

TWA: 1640 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

TWA: 400 ppm 8 hour(s). Form: All forms.

**NIOSH REL (United States, 12/2001).**

CEIL: 1800 mg/m<sup>3</sup> 15 minute(s). Form: All forms.

CEIL: 440 ppm 15 minute(s). Form: All forms.

TWA: 350 mg/m<sup>3</sup> 10 hour(s). Form: All forms.

TWA: 85 ppm 10 hour(s). Form: All forms.

**OSHA PEL (United States, 8/1997).**

TWA: 2000 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

TWA: 500 ppm 8 hour(s). Form: All forms.

Carbon Black

**ACGIH TLV (United States, 1/2005).**

TWA: 3.5 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**NIOSH REL (United States, 12/2001).**

TWA: 3.5 mg/m<sup>3</sup> 10 hour(s). Form: All forms.

**OSHA PEL (United States, 8/1997).**

TWA: 3.5 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**Canada**

**Product name**

Heptane

**Exposure limits**

**ACGIH TLV (United States, 1/2005).**

STEL: 2050 mg/m<sup>3</sup> 15 minute(s). Form: All forms.

STEL: 500 ppm 15 minute(s). Form: All forms.

TWA: 1640 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

TWA: 400 ppm 8 hour(s). Form: All forms.

Carbon Black

**ACGIH TLV (United States, 1/2005).**

TWA: 3.5 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**Mexico**

**Product name**

Heptane

**Exposure limits**

**NOM-010-STPS (Mexico, 9/2000). Skin**

CCT: 2000 mg/m<sup>3</sup> 15 minute(s). Form: All forms

CCT: 500 ppm 15 minute(s). Form: All forms

CPT: 1600 mg/m<sup>3</sup> 8 hour(s). Form: All forms

CPT: 400 ppm 8 hour(s). Form: All forms

Carbon Black

**NOM-010-STPS (Mexico, 9/2000).**

CCT: 7 mg/m<sup>3</sup> 15 minute(s). Form: Smoke

CPT: 3.5 mg/m<sup>3</sup> 8 hour(s). Form: Smoke

**Engineering measures**

: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Personal protection**

**Eyes**

: Safety glasses.

**Skin**

: Lab coat.

**Respiratory**

: A respirator is not needed under normal and intended conditions of use.

**Hands**

: Natural rubber (latex).



**HMIS Code/Personal protective equipment**

: B

**Personal protection in case of a large spill**

: Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

**9 . Physical and chemical properties**

**Physical state**

: Liquid.

**Flash point**

: Closed cup: -6.6°C (20.1°F).(Tagliabue.)

**Auto-ignition temperature**

: 203.8°C (398.8°F)

**Flammable limits**

: Lower: 1.1% Upper: 6.7%

**Color**

: Black.

**Odor**

: Hydrocarbon. (Slight.)

**Boiling/condensation point**

: 93.33°C (200°F)

**Melting/freezing point**

: May start to solidify at -91.11°C (-132°F) based on data for: Heptane.

**Critical temperature**

: The lowest known value is 266.9°C (512.4°F) (Heptane).

**Relative density**

: 0.74 (Water = 1)

- Vapor pressure** : 5.3 kPa (40 mm Hg) (at 20°C)
- Vapor density** : 3.5 (Air = 1)
- Volatility** : 85 to 87% (v/v)
- Evaporation rate** : 2.8 compared with Butyl acetate.
- VOC** : 86 (%)
- Solubility** : Very slightly soluble in cold water, hot water.

## 10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive with oxidizing materials.
- Hazardous polymerization** : Will not occur.
- Conditions of reactivity** : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.  
Highly flammable in the presence of the following materials or conditions: heat.

## 11 . Toxicological information

| Product/ingredient name | Toxicity data |              | Route | Species |
|-------------------------|---------------|--------------|-------|---------|
|                         | Test          | Result       |       |         |
| Carbon Black            | LD50          | >15400 mg/kg | Oral  | Rat     |

### Acute Effects

- Eyes** : Irritating to eyes.
- Skin** : Irritating to skin.
- Inhalation** : Irritating to respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Potential chronic health effects** : Carcinogenic effects Classified + (Proven.) by NIOSH [Carbon Black]. Classified 2B (Possible for humans.) by IARC [Carbon Black]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Carbon Black].  
Mutagenic effects Not available.  
Teratogenic effects: Not available.
- Target organs** : Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12 . Ecological information





- Environmental precautions** : Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
- Products of degradation** : These products are carbon oxides and water.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

## 14 . Transport information

NAERG : 128

| Regulatory information   | Proper shipping name                      | Class | UN number | PG  | Label   |
|--------------------------|---|-------|-----------|---|---|
| UN / IATA Classification | ADHESIVES (Containing a flammable liquid) | 3     | UN1133    | II  |  |
| IMDG Classification      | ADHESIVES (Containing a flammable liquid) | 3     | UN1133    | II  |  |
| DOT Classification       | ADHESIVES (Containing a flammable liquid) | 3     | UN1133    | II  |  |
| TDG Classification       | ADHESIVES (Containing a flammable liquid) | 3     | UN1133    | II  |  |
| Additional information   | UN  | IMDG  | IATA      | DOT   | TDG   |
|                          | -   | -     | -         | <b>Packaging instruction</b><br><b>Passenger aircraft</b><br>Quantity limitation: 5 L<br><br><b>Cargo aircraft</b><br>Quantity limitation: 60 L | -   |

## 15 . Regulatory information

### United States

**HCS Classification** : Flammable liquid  
Irritating material  
Carcinogen  
Target organ effects

**U.S. Federal regulations** : TSCA 4(a) final test rules: Heptane  
TSCA 8(a) PAIR: Heptane  
TSCA 8(b) inventory: All components listed.  
TSCA 12(b) one-time export: Heptane  
SARA 302/304/311/312 extremely hazardous substances: No products were found.  
SARA 302/304 emergency planning and notification: No products were found.  
SARA 302/304/311/312 hazardous chemicals: Heptane; Carbon Black  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Heptane: Fire hazard; Carbon Black: Immediate (acute) health hazard, Delayed (chronic) health hazard  
Clean Water Act (CWA) 307: No products were found.  
Clean Water Act (CWA) 311: No products were found.  
Clean Air Act (CAA) 112 accidental release prevention: No products were found.  
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**State regulations** : Pennsylvania RTK: Heptane: (generic environmental hazard); Carbon Black: (generic environmental hazard)  
Massachusetts RTK: Heptane; Carbon Black  
New Jersey: Heptane; Carbon Black  
**WARNING:** This product contains a chemical known to the State of California to cause cancer.

| Ingredient name | Cancer | Reproductive | No significant blue level | Maximum acceptable dosage level |
|-----------------|--------|--------------|---------------------------|---------------------------------|
| Carbon Black    | Yes.   | No.          | No.                       | No.                             |

**Canada**

**WHMIS (Canada)**

: Class B-2: Flammable liquid  
Class D-2A: Material causing other toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).



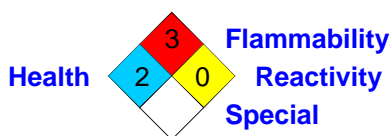
DSL : All components listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR, the United States OSHA and the Mexican NOM -018-STPS-2000. This MSDS contains all the information required by the CPR, OSHA, the American National Standard Institute (ANSI) Z400.1 and NOM -018-STPS-2000.

**Mexico**

**Classification**

:



**HAZARD RATINGS**

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

**International lists**

: This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

**16 . Other information**

**Label requirements (U.S.A.)**

: EXTREMELY FLAMMABLE LIQUID AND VAPOR.  
CANCER HAZARD.  
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.  
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:  
RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.  
VAPOR MAY CAUSE FLASH FIRE.

**Hazardous Material Information System (U.S.A.)**

:

**HMSI RATING**

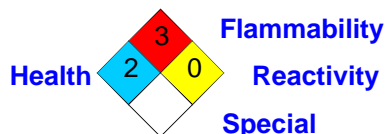
|                     |   |   |
|---------------------|---|---|
| Health              | * | 2 |
| Fire hazard         |   | 3 |
| Physical Hazard     |   | 0 |
| Personal protection |   | B |

**HAZARD RATINGS**

- 4- Extreme
  - 3- Serious
  - 2- Moderate
  - 1- Slight
  - 0- Minimal
- See section 8 for more detailed information on personal protection.

**National Fire Protection Association (U.S.A.)**

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**References**

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.

**Date of issue**

: 09/15/2006

**Version**

: 1

**Notice to reader**

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