

# SAFETY DATA SHEET.

Issuing date 27-May-2015

Revision Date 27-May-2015

Version 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name #14 DRY GRAPHITE LUBE

Recommended use of the chemical  
and restrictions on use

Product code F00954

Product Type Extremely flammable aerosol  
Synonyms None

Supplier's details

Recommended Use Dry lubricant.  
Uses advised against No information available

**Manufactured For:**  
1st Ayd Corporation  
1325 Gateway Drive  
Elgin, IL 60124

Emergency telephone number

**Chemical Emergency Phone  
Number** 800-255-3924

**Company Emergency Phone  
Number** 1-800-422-3033 Mon-Fri 8:00am-5:00pm

## 2. HAZARDS IDENTIFICATION

Classification

|                                                  |                |
|--------------------------------------------------|----------------|
| Skin corrosion/irritation                        | Category 2     |
| Serious eye damage/eye irritation                | Category 2A    |
| Specific target organ toxicity (single exposure) | Category 3     |
| Aspiration toxicity                              | Category 1     |
| Flammable aerosols                               | Category 1     |
| Gases under pressure                             | Compressed Gas |

GHS Label elements, including  
precautionary statements

## Emergency Overview

**DANGER****Hazard Statements**

Causes skin irritation  
 Causes serious eye irritation  
 May cause drowsiness or dizziness  
 May be fatal if swallowed and enters airways  
 Extremely flammable aerosol  
 Contains gas under pressure; may explode if heated

**Appearance** opaque**Physical state** Aerosol**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 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

**Precautionary Statements - Response**

Specific treatment (see first aid on this label)  
 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  
 IF ON SKIN: Wash with plenty of soap and water.  
 Take off contaminated clothing and wash before reuse  
 If skin irritation occurs: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed  
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None

**Other information**

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name              | CAS-No     | Weight %* |
|----------------------------|------------|-----------|
| HEPTANE                    | 64742-49-0 | 40-50     |
| PROPANE/ISOBUTANE/N-BUTANE | 68476-86-8 | 20-30     |
| ISOPROPYL ALCOHOL          | 67-63-0    | 20-30     |
| GRAPHITE                   | 7782-42-5  | 1-10      |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

|                       |                                                                                                                                                                              |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b> | Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.                                                                                          |
| <b>Eye contact</b>    | In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.                                                             |
| <b>Skin contact</b>   | Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.                         |
| <b>Inhalation</b>     | Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.                                  |
| <b>Ingestion</b>      | Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion. |

**Most important symptoms/effects, acute and delayed**

|                      |                                                                                                               |
|----------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Main Symptoms</b> | Causes skin irritation. Causes eye irritation. May cause respiratory irritation. May be harmful if swallowed. |
|----------------------|---------------------------------------------------------------------------------------------------------------|

**Indication of immediate medical attention and special treatment needed, if necessary**

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

water fog. Dry chemical. Carbon dioxide (CO2). Cool containers / tanks with water spray.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Flammable or extremely flammable aerosol. Container may burst in fire.

**Explosion Data**

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use with adequate ventilation to keep the exposure levels below the OELs. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid dust formation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharges.

**Environmental precautions****Environmental precautions**

Report spills as required by local and federal regulations. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system.

**Methods and materials for containment and cleaning up****Methods for Containment**

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid contact with skin and eyes. Avoid breathing vapors or mist. DO not puncture or incinerate container. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Do not lay on its side. Store in a cool place.

**Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible products**

Store away from strong oxidizers and acids.

**Aerosol Level**

3

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Chemical Name                            | ACGIH TLV                                                                        | OSHA PEL                                                                                                                                                                                                                                                                                                                                         | NIOSH IDLH                                                                                                                                                                               |
|------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HEPTANE<br>64742-49-0                    | TLV: 400 ppm<br>STEL: 500 ppm                                                    | TWA: 500 ppm                                                                                                                                                                                                                                                                                                                                     | -                                                                                                                                                                                        |
| PROPANE/ISOBUTANE/N-BUTANE<br>68476-86-8 | 74-98-6: TWA: 1000 ppm<br>106-97-8: STEL: 1000 ppm<br>75-28-5: STEL: 1000 ppm    | 74-98-6: TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1800 mg/m <sup>3</sup><br>106-97-8: (vacated) TWA: 800 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup>                                                                                                                                           | 74-98-6: IDLH: 2100 ppm<br>TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup><br>106-97-8: TWA: 800 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>75-28-5: TWA: 800 ppm<br>TWA: 1900 mg/m <sup>3</sup> |
| ISOPROPYL ALCOHOL<br>67-63-0             | STEL: 400 ppm<br>TWA: 200 ppm                                                    | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup>                                                                                                                                                                | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>                                                                            |
| GRAPHITE<br>7782-42-5                    | TWA: 2 mg/m <sup>3</sup> respirable fraction<br>all forms except graphite fibers | TWA: 15 mg/m <sup>3</sup> total dust<br>synthetic<br>TWA: 5 mg/m <sup>3</sup> respirable fraction<br>synthetic<br>(vacated) TWA: 2.5 mg/m <sup>3</sup><br>respirable dust natural<br>(vacated) TWA: 10 mg/m <sup>3</sup> total<br>dust synthetic<br>(vacated) TWA: 5 mg/m <sup>3</sup><br>respirable fraction synthetic<br>TWA: 15 mppcf natural | IDLH: 1250 mg/m <sup>3</sup><br>TWA: 2.5 mg/m <sup>3</sup> natural<br>respirable dust                                                                                                    |

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety &amp; Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Exposure controls****Engineering Measures**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

**Individual protection measures, such as personal protective equipment****Eye/Face Protection**

Safety glasses with side-shields.

**Skin and body protection**

Chemical resistant apron. Protective gloves.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and chemical properties****Physical state**

Aerosol

**Appearance**

opaque

**Color**

black

**Odor**

Solvent

**Odor Threshold**

No information available

**Property****Values****Remarks • Methods****pH**

No information available

**Melting/freezing point**

No information available

|                                        |                          |                     |
|----------------------------------------|--------------------------|---------------------|
| Boiling point/boiling range            | No information available |                     |
| Flash Point                            | -96 °C / -141 °F         | Based on propellant |
| Evaporation rate                       | No information available |                     |
| Flammability (solid, gas)              | No information available |                     |
| Flammability Limits in Air             |                          |                     |
| upper flammability limit               | No information available |                     |
| lower flammability limit               | No information available |                     |
| Vapor pressure                         | No information available |                     |
| Vapor density                          | No information available |                     |
| Specific Gravity                       | 0.679                    |                     |
| Water solubility                       | Practically insoluble    |                     |
| Partition coefficient: n-octanol/water | No information available |                     |
| Autoignition temperature               | No information available | Not applicable      |
| Decomposition temperature              | No information available |                     |
| Viscosity                              | No information available |                     |
| Explosive properties                   | No information available |                     |

Other information

VOC Content(%) 98.86

## 10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Store away from strong oxidizers and acids.

Hazardous Decomposition Products

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

|                            |                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Product Information</b> | Product does not present an acute toxicity hazard based on known information                                      |
| Inhalation                 | Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness. |
| Eye contact                | May cause slight irritation.                                                                                      |
| Skin contact               | Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.                             |
| Ingestion                  | Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.  |

Component Information

| Chemical Name         | LD50 Oral            | LD50 Dermal             | LC50 Inhalation         |
|-----------------------|----------------------|-------------------------|-------------------------|
| HEPTANE<br>64742-49-0 | > 5000 mg/kg ( Rat ) | > 3160 mg/kg ( Rabbit ) | = 73680 ppm ( Rat ) 4 h |

|                              |                      |                         |                                       |
|------------------------------|----------------------|-------------------------|---------------------------------------|
| ISOPROPYL ALCOHOL<br>67-63-0 | = 1870 mg/kg ( Rat ) | = 4059 mg/kg ( Rabbit ) | = 72600 mg/m <sup>3</sup> ( Rat ) 4 h |
|------------------------------|----------------------|-------------------------|---------------------------------------|

Information on toxicological effects**Symptoms**

Symptoms of overexposure may cause slight irritation to eyes. May respiratory system irritation. May be fatal if swallowed and enters airways. May cause mild irritation. Irritating to skin. Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                                  |                                                                                                  |
|----------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b> | Irritating to skin.                                                                              |
| <b>Eye damage/irritation</b>     | Irritating to eyes.                                                                              |
| <b>Sensitization</b>             | No information available.                                                                        |
| <b>Germ Cell Mutagenicity</b>    | No information available.                                                                        |
| <b>Carcinogenicity</b>           | The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen. |

*IARC: (International Agency for Research on Cancer)*

*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

*Group 1 - Carcinogenic to Humans*

*OSHA: (Occupational Safety & Health Administration)*

*X - Present*

**Reproductive toxicity** The ingredients are not reproductive hazards.

**Specific target organ systemic toxicity (single exposure)** May cause drowsiness and dizziness.

**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Chronic toxicity**

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

**Target Organ Effects****Aspiration hazard**

Central nervous system, Central Vascular System (CVS), Eyes, Respiratory system, Skin. May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5550 mg/kg

ATEmix (dermal) 7023 mg/kg

ATEmix (inhalation-vapor) 56 mg/l

**12. ECOLOGICAL INFORMATION**Ecotoxicity

| Chemical Name                            | Toxicity to algae                                                                                 | Toxicity to fish                                                                                                                                               | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------|
| PROPANE/ISOBUTANE/N-BUTANE<br>68476-86-8 | -                                                                                                 | -                                                                                                                                                              | -                          | -                                                   |
| ISOPROPYL ALCOHOL<br>67-63-0             | 1000 mg/L EC50<br>Desmodesmus subspicatus<br>96h 1000 mg/L EC50<br>Desmodesmus subspicatus<br>72h | 11130 mg/L LC50<br>Pimephales promelas 96h<br>static 9640 mg/L LC50<br>Pimephales promelas 96h<br>flow-through 1400000 µg/L<br>LC50 Lepomis macrochirus<br>96h | -                          | 13299 mg/L EC50 Daphnia magna 48h                   |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name                            | log Pow |
|------------------------------------------|---------|
| PROPANE/ISOBUTANE/N-BUTANE<br>68476-86-8 | 2.8     |
| ISOPROPYL ALCOHOL<br>67-63-0             | 0.05    |

Other adverse effects No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment

**Waste Disposal Methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

**Contaminated packaging** Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

**DOT Ground** CONSUMER COMMODITY ORM-D  
or  
LIMITED QUANTITY

**IATA** UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

**IMDG** UN1950, AEROSOLS, 2.1, LTD. QTY.

### 15. REGULATORY INFORMATION

#### International Inventories

| Chemical Name              | TSCA | DSL/NDSL | EINECS/ELI<br>NCS | ENCS       | IECSC | KECL | PICCS | AICS |
|----------------------------|------|----------|-------------------|------------|-------|------|-------|------|
| HEPTANE                    | X    | X        | X                 | X          | X     | X    | X     | X    |
| PROPANE/ISOBUTANE/N-BUTANE | X    | X        | X                 | Not listed | X     | X    | X     | X    |
| ISOPROPYL ALCOHOL          | X    | X        | X                 | X          | X     | X    | X     | X    |
| GRAPHITE                   | X    | X        | X                 | Not listed | X     | X    | X     | X    |

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 CHINA - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

#### U.S. Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name               | CAS-No  | Weight %* | SARA 313 - Threshold Values % |
|-----------------------------|---------|-----------|-------------------------------|
| ISOPROPYL ALCOHOL - 67-63-0 | 67-63-0 | 20-30     | 1.0                           |

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire Hazard                       | Yes |
| Sudden Release of Pressure Hazard | Yes |
| Reactive Hazard                   | no  |

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

**U.S. State Regulations****California Proposition 65**

This product does not contain any known Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical Name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| ISOPROPYL ALCOHOL<br>67-63-0 | X          | X             | X            |
| GRAPHITE<br>7782-42-5        | X          | X             | X            |

EPA Pesticide Registration Number Not applicable

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**16. OTHER INFORMATION**

|             |                 |                |                   |                                 |
|-------------|-----------------|----------------|-------------------|---------------------------------|
| <b>NFPA</b> | Health Hazard 2 | Flammability 4 | Instability 0     | Physical and chemical hazards - |
| <b>HMIS</b> | Health Hazard 2 | Flammability 4 | Physical Hazard 1 | Personal protection B           |

Prepared By Regulatory Affairs  
 Issuing date 27-May-2015  
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 Revision Note  
 (M)SDS sections updated

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet