#### Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Date of issue: 09/03/2014 Revision date: 09/03/2014 Version: 1.0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. : SERVICE PRO FAST DRY BRAKE CLEANER Product name Product code : SP4505 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture : Brake cleaner. 1.3. Details of the supplier of the safety data sheet Manufactured for: The Penrav Companies. Inc. AIOD 440 Denniston Ct. Wheeling, IL 60090 P.O. Box 1861 T (800) 373-6729 Montrose, CO 81402-1861 970-249-6336 1.4. **Emergency telephone number** (800) 373-6729 Emergency number CHEMTREC (800) 424-9300 CHEMTREC International +1 (703) 527-3887 24 hr **SECTION 2: Hazards identification** 2.1. **Classification of the substance or mixture GHS-US classification** Flammable Liquid 2 Skin irritation 2 Reproductive toxicity 2 (developmental) Specific target organ toxicity - Single exposure 3 Specific target organ toxicity - Repeated exposure 2 Aspiration hazard 1 2.2. Label elements **GHS-US** labelling Hazard pictograms (GHS-US) GHS02 GHS07 GHS08 Signal word (GHS-US) : Danger Hazard statements (GHS-US) : Highly flammable liquid and vapor. Causes skin irritation. Suspected of damaging the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Precautionary statements (GHS-US) : Keep away from heat/sparks/open flames/hot surfaces.- No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash hands thoroughly after handling. 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. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. If exposed or concerned: Get medical advice/attention. If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Dispose of contents and container in accordance with all local, regional, national and international regulations. 2.3. **Other hazards** No additional information available 2.4 Unknown acute toxicity (GHS-US)

75 percent of the mixture consists of ingredient(s) of unknown acute toxicity.



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### SECTION 3: Composition/information on ingredients

### 3.1. Substance

#### Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Heptane, branched, cyclic and linear	(CAS No) 426260-76-6	60 - 100	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
n-Heptane	(CAS No) 142-82-5	15 - 50	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
Toluene	(CAS No) 108-88-3	1 - 5	Flam. Liq. 2 Skin Irrit. 2 Repr. 2 (developmental) STOT SE 3 STOT RE 2 Asp. Tox. 1
Ethylbenzene	(CAS No) 100-41-4	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Carc. 2 Asp. Tox. 1
Benzene	(CAS No) 71-43-2	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Oral) Skin Irrit. 2 Eye Irrit. 2A Muta. 1B Carc. 1A STOT RE 1 Asp. Tox. 1

\* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation :	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact :	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
First-aid measures after eye contact :	In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
First-aid measures after ingestion :	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
4.2. Most important symptoms and effects	, both acute and delayed
Symptoms/injuries after inhalation :	May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
Symptoms/injuries after skin contact :	Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact :	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion :	May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media : Powder, water spray, foam, carbon dioxide.			
Unsuitable extinguishing media	: Do not use a heavy water stream.		
5.2. Special hazards arising from the substance or mixture			
Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon.		



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.3. Advice for fire	-fightere	
rotection during firefigh	ting : Keep upw protectior	vind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory n (SCBA). Vapors may be heavier than air and may travel along the ground to a distant burce and flash back. Use water spray to keep fire-exposed containers cool.
ECTION 6: Accid	ental release measures	
	cautions, protective equipment and	
Seneral measures		onal protection recommended in Section 8. Isolate the hazard area and deny entry to ary and unprotected personnel. Eliminate sources of ignition.
.2. Methods and	material for containment and clean	ing up
or containment	container	nd/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable . Do not flush to sewer or allow to enter waterways. Use appropriate Personal e Equipment (PPE).
lethods for cleaning up	: Scoop up	material and place in a disposal container. Provide ventilation.
6.3. Reference to	other sections	
See section 8 for further	information on protective clothing and	equipment and section 13 for advice on waste disposal.
SECTION 7: Handl	ing and storage	
7.1. Precautions f	or safe handling	
Precautions for safe handling : Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care Use only non-sparking tools. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.		
Hygiene measures	: Launder o	contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
	r safe storage, including any incom	npatibilities
Storage conditions       : Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place.         Store locked up. Keep cool. Keep away from heat, sparks, and flame.		
.3. Specific end	use(s)	
7.3. Specific end Not available.		
Not available. SECTION 8: Expos	sure controls/personal prote	ction
Not available.	sure controls/personal prote	ction
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c	sure controls/personal prote neters yclic and linear (426260-76-6)	
Not available. SECTION 8: Exposed 8.1. Control parar Heptane, branched, c USA ACGIH	sure controls/personal prote neters yclic and linear (426260-76-6) ACGIH TWA	Not applicable.
lot available. SECTION 8: Expos .1. Control parar Heptane, branched, c	sure controls/personal prote neters yclic and linear (426260-76-6)	
lot available. SECTION 8: Expos A.1. Control parar Heptane, branched, c USA ACGIH USA OSHA	sure controls/personal prote neters yclic and linear (426260-76-6) ACGIH TWA	Not applicable.
lot available. SECTION 8: Expos 1. Control parar Heptane, branched, c USA ACGIH	sure controls/personal prote neters yclic and linear (426260-76-6) ACGIH TWA	Not applicable.
lot available. SECTION 8: Expos .1. Control parar Heptane, branched, c USA ACGIH USA OSHA n-Heptane (142-82-5)	yclic and linear (426260-76-6) ACGIH TWA OSHA PEL (TWA)	Not applicable. Not applicable.
Not available. SECTION 8: Expose 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA n-Heptane (142-82-5) USA ACGIH	yclic and linear (426260-76-6) ACGIH TWA OSHA PEL (TWA) ACGIH TWA (ppm)	Not applicable. Not applicable. 400 ppm
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA n-Heptane (142-82-5) USA ACGIH USA ACGIH	ACGIH TWA (ppm) ACGIH STEL (ppm)	Not applicable. Not applicable. 400 ppm 500 ppm
Not available. SECTION 8: Expose 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA ACGIH USA ACGIH USA ACGIH USA OSHA USA OSHA	sure controls/personal proteneters yclic and linear (426260-76-6) ACGIH TWA OSHA PEL (TWA) ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m³)	Not applicable.       Not applicable.       400 ppm       500 ppm       2000 mg/m³
lot available. SECTION 8: Expos .1. Control parar Heptane, branched, c USA ACGIH USA OSHA n-Heptane (142-82-5) USA ACGIH USA ACGIH USA OSHA	sure controls/personal proteneters yclic and linear (426260-76-6) ACGIH TWA OSHA PEL (TWA) ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m³)	Not applicable.       Not applicable.       400 ppm       500 ppm       2000 mg/m³
lot available. SECTION 8: Expos .1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA ACGIH USA ACGIH USA ACGIH USA ACGIH USA OSHA USA OSHA Toluene (108-88-3)	ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm)	Not applicable. Not applicable. 400 ppm 500 ppm 2000 mg/m <sup>3</sup> 500 ppm
Not available. SECTION 8: Expos 3.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA ACGIH USA ACGIH USA OSHA USA OSHA USA OSHA USA OSHA USA ACGIH USA ACGIH	ACGIH TWA (ppm) ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm)	Not applicable.       Not applicable.       400 ppm       500 ppm       2000 mg/m³       500 ppm       200 ppm
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA ACGIH USA ACGIH USA OSHA USA OSHA USA ACGIH USA ACGIH USA ACGIH USA ACGIH USA ACGIH	ACGIH TWA (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) OSHA PEL (TWA) (ppm)	Not applicable.       Not applicable.       400 ppm       500 ppm       2000 mg/m³       500 ppm       200 ppm       200 ppm
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA ACGIH USA ACGIH USA OSHA USA OSHA USA OSHA USA ACGIH USA ACGIH USA ACGIH USA OSHA USA OSHA	ACGIH TWA (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) OSHA PEL (TWA) (ppm)	Not applicable.       Not applicable.       400 ppm       500 ppm       2000 mg/m³       500 ppm       200 ppm       200 ppm
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA OSHA USA OSHA USA OSHA USA OSHA USA ACGIH USA ACGIH USA OSHA USA OSHA USA OSHA USA OSHA USA OSHA USA OSHA USA OSHA USA OSHA	ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) -4)	Not applicable.         Not applicable.         400 ppm         500 ppm         2000 mg/m³         500 ppm         200 ppm         200 ppm         300 ppm
lot available. SECTION 8: Expos A.1. Control parar Heptane, branched, c USA ACGIH USA OSHA ISA ACGIH USA ACGIH USA OSHA USA OSHA	sure controls/personal proteneters yclic and linear (426260-76-6) ACGIH TWA OSHA PEL (TWA) ACGIH STEL (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m³) OSHA PEL (TWA) (ppm) ACGIH TWA (ppm) ACGIH TWA (ppm) OSHA PEL (Ceiling) (ppm) 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	Not applicable.         Not applicable.         400 ppm         500 ppm         2000 mg/m³         500 ppm         200 ppm         200 ppm         300 ppm         20 ppm         200 ppm         200 ppm         20 ppm         20 ppm         200 ppm         200 ppm         200 ppm         200 ppm         200 ppm         200 ppm
Not available. SECTION 8: Expos 8.1. Control parar Heptane, branched, c USA ACGIH USA OSHA USA OSHA Ethylbenzene (100-41 USA OSHA	ACGIH TWA (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) ACGIH TWA (ppm) ACGIH STEL (ppm) OSHA PEL (TWA) (mg/m <sup>3</sup> ) OSHA PEL (TWA) (ppm) ACGIH TWA (ppm) OSHA PEL (Ceiling) (ppm)	Not applicable.Not applicable.400 ppm500 ppm2000 mg/m³500 ppm2000 ppm200 ppm300 ppm435 mg/m³

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Benzene (71-43-2)		
USA ACGIH	ACGIH STEL (ppm)	2.5 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	5 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm

### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties
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Physical state	: Liquid
Appearance	: Clear
Color	: Colorless
Odor	: Solvent
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 0.68 - 0.71
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

## No additional information available

## SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.



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10.2. Chemical stability		
Stable under normal storage conditions. May form	flammable/explosive vapor-air mixture.	
10.3. Possibility of hazardous reactions		
No dangerous reaction known under conditions of	normal use.	
10.4. Conditions to avoid		
Heat. Incompatible materials. Sources of ignition.		
10.5. Incompatible materials		
Strong oxidizing agents. Strong reducing agents.		
10.6. Hazardous decomposition products		
May include, and are not limited to: oxides of carb	on.	
SECTION 11: Toxicological information	on	
11.1. Information on toxicological effects		
	: Not classified	
SP4505		
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat	> 20 mg/l/4h	
n-Hentane (142-82 5)	·	
n-Heptane (142-82-5) LD50 dermal rabbit	3000 mg/kg	
LC50 inhalation rat (mg/l)	103 g/m³/4h	
Toluene (108-88-3)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	12124 mg/kg	
LD50 dermal rabbit	8390 mg/kg	
LC50 inhalation rat (mg/l)	28.1 mg/l/4h	
Ethylbenzene (100-41-4)		
LD50 oral rat	3500 mg/kg	
LD50 dermal rabbit	15354 mg/kg	
LC50 inhalation rat (mg/l)	17.2 mg/l/4h	
Benzene (71-43-2)		
LD50 oral rat	930 mg/kg	
LD50 dermal rabbit	> 9.4 mL/kg	
LC50 inhalation rat (ppm)	13050 - 14380 ppm/4h	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.	
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.	
Carcinogenicity	: Based on available data, the classification criteria are not met.	
Toluene (108-88-3)		
IARC group	3 - Not classifiable	
Ethylbenzene (100-41-4)	· · · · · · · · · · · · · · · · · · ·	
IARC group	2B - Possibly carcinogenic to humans	
National Toxicity Program (NTP) Status	1 - Evidence of Carcinogenicity	
Benzene (71-43-2)		
IARC group	1 - Carcinogenic to humans	
National Toxicity Program (NTP) Status	1 - Evidence of Carcinogenicity, 2 - Known Human Carcinogens	
	In OSHA Specifically Regulated Carcinogen list	
Poproductivo tovicity		
Reproductive toxicity	: Suspected of damaging the unborn child.	
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.	
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.	
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Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	<ul> <li>May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.</li> </ul>
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

SECTION	ON 12: Ecological information	
12.1.	Toxicity	
Ecology -	- general	: May cause long-term adverse effects in the aquatic environment.
12.2.	Persistence and degradability	
SP4505	5	
Persiste	ence and degradability	Not established.
12.3.	Bioaccumulative potential	
SP4505	5	
Bioaccu	umulative potential	Not established.
12.4.	Mobility in soil	
No additi	onal information available	
12.5.	Other adverse effects	
Effect on	ozone layer	: No additional information available
Effect on	the global warming	: No known ecological damage caused by this product.

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste disposal recommendations	This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	
Additional information	: Handle empty containers with care because residual vapors are flammable.	
SECTION 14: Transport informati	ion	

SECTION 14. Transport information	
In accordance with DOT	
14.1. UN number	
UN-No.	UN1206
14.2. UN proper shipping name	
Proper Shipping Name	: Heptanes
Department of Transportation Hazard Classes	: 3
Hazard labels	
Packing group	: 11
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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n-Heptane (142-82-5)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Toluene (108-88-3)	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Ethylbenzene (100-41-4)	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %
Benzene (71-43-2)	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %

### 15.3. US State regulations

SP4505	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth
	defects or other reproductive harm.

SECTION 16: Other information	
Indication of changes	: None.
Date of issue	: 09/03/2014
Other information	: None.
NFPA health hazard NFPA fire hazard NFPA reactivity	: 2 : 3 : 0



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