Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 08/01/2014 Revision date: 02/28/2018 Supersedes: 01/19/2015 Version: 2.0

SECTION 1: Identification

Identification

Product form : Mixture

Product name : Heavy Duty Vehicle

: HDV/23P Product code

Recommended use and restrictions on use

Use of the substance/mixture : oil additive

Supplier

Manufacturer

Justice Brothers, Inc. 2734 Huntington Drive Duarte, CA 91010 - USA T (626) 359-9174 (M-F, 8am-5pm)

Emergency telephone number 1.4.

Emergency number : CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 Carc. 2 Lact.

Asp. Tox. 1

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) Combustible liquid

May be fatal if swallowed and enters airways

Suspected of causing cancer

May cause harm to breast-fed children

Precautionary statements (GHS-US) Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not breathe dusts or mists.

Avoid contact during pregnancy/while nursing.

Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention.

If swallowed: Immediately call a poison center or doctor

Do NOT induce vomiting.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation

Other hazards which do not result in classification

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Petroleum Solvent	(CAS-No.) 64742-47-8	15 - 40
Petroleum Solvent	(CAS-No.) 64742-96-7	15 - 40
Proprietary polymer 1	(CAS-No.) Proprietary	10 - 20
Proprietary polymer 2	(CAS-No.) Proprietary	3 - 7

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact

: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation

persists.

First-aid measures after eye contact

First-aid measures after ingestion

: 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact

: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact

: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/effects after ingestion

May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.

Chronic symptoms

: Suspected of causing cancer. May cause harm to breast-fed children.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid. Products of combustion may include, and are not limited to: oxides of

carbon.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recomm

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove ignition sources. Use special care to avoid static electric charges. Use only non-sparking tools.

6.1.1. For non-emergency personnel

No additional information available

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6.1.2. For emergency responders

No additional information available

6.2. **Environmental precautions**

Prevent entry to sewers and public waters.

Methods and material for containment and cleaning up

For containment

: Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up

: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling

: Obtain special instructions before use. Keep away from sources of ignition - No smoking. Avoid contact during pregnancy/while nursing. Avoid contact with skin and eyes. Do not breathe dusts or mists. Do not swallow. Handle and open container with care. When using do not eat, drink or

Hygiene measures

: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities 7.2.

Storage conditions

: Keep out of the reach of children. Keep container tightly closed. Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

Petro	leum S	olvent ((64742-4	1 7-8)
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Not applicable

Petroleum Solvent (64742-96-7)

Not applicable

Proprietary polymer 1 (Proprietary)

Not applicable

Proprietary polymer 2 (Proprietary)

Not applicable

Appropriate engineering controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Environmental exposure controls

: Maintain levels below Community environmental protection thresholds. Avoid release to the

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. 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.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid Appearance : Clear Color : Brown Odor : Kerosene

Odor threshold : No data available : No data available рΗ Melting point : No data available Freezing point : No data available Boiling point : > 178.3 °C (> 353 °F)

Flash point : 80 °C (176 °F) Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Flammable Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : 0.82 g/cm³ Solubility : No data available Partition coefficient n-octanol/water : No data available Auto-ignition temperature : No data available

: 14 cSt @ 40 °C (104 °F) Viscosity, kinematic Viscosity, dynamic : No data available : No data available **Explosion limits**

: No data available

Explosive properties : No data available Oxidizing properties : No data available

Other information

Decomposition temperature

No additional information available

SECTION 10: Stability and reactivity

Reactivity 10.1.

No dangerous reactions known under normal conditions of use.

Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

Heat. Sources of ignition. Incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Petroleum Solvent (64742-47-8)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat	> 5.2 mg/l/4h	

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Petroleum Solvent (64742-96-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.28 mg/l/4h
Proprietary polymer 1 (Proprietary)	
LD50 oral rat	> 21500 µl/kg
Proprietary polymer 2 (Proprietary)	
LD50 oral rat	2000 mg/kg
ATE US (oral)	2000 mg/kg body weight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
	. Suspected of earliest.
Proprietary polymer 1 (Proprietary)	
IARC group	2B - Possibly carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity	: May cause harm to breast-fed children.
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	 May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.
Chronic symptoms	: Suspected of causing cancer. May cause harm to breast-fed children.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.
SECTION 12: Ecological information	
2.1. Toxicity	
Ecology - general	: Toxic to aquatic life with long lasting effects.
Petroleum Solvent (64742-47-8)	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Proprietary polymer 1 (Proprietary)	
LC50 fish 1	> 300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 fish 2	> 0.0109 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
2.2. Persistence and degradability	
Heavy Duty Vehicle Persistence and degradability	Not established.
<u> </u>	INUL ESTABIISHEU.
2.3. Bioaccumulative potential	
Heavy Duty Vehicle	
Bioaccumulative potential	Not established.
Petroleum Solvent (64742-47-8)	
BCF fish 1	61 - 159
Proprietary polymer 1 (Proprietary)	
Partition coefficient n-octanol/water	> 6
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Proprietary polymer 2 (Proprietary)	
Partition coefficient n-octanol/water	5.5 - 6.0

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

Department of Transportation (DOT)

No additional information available

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 except for:

Proprietary polymer 2 (Proprietary)

CAS-No. Proprietary

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Date of issue : 08/01/2014
Revision date : 02/28/2018
Other information : None.

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