SAFETY DATA SHEET



Section 1. Identification

Product name	Aero 40 Red
SDS #	459670
Code	459670-US03
Relevant identified uses o	f the substance or mixture and uses advised against
Product use	Hydraulic fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Lubricants USA Inc. 1500 Valley Road Wayne, NJ 07470 Telephone: +1-888-CASTROL
EMERGENCY HEALTH	+1-800-447-8735
EMERGENCY SPILL INFORMATION:	+1-800-424-9300 (CHEMTREC USA) +1-703-527-3887 (CHEMTREC outside the US)

Section 2. Hazards identification

OSHA/HCS status	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	Not classified.
GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Hazards not otherwise classified	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Section 3. Composition/information on ingredients

Substance/mixture Mixture		
Ingredient name	CAS number	%
Distillates (petroleum), hydrotreated light naphthenic Distillates (petroleum), hydrotreated light paraffinic Distillates (petroleum), hydrotreated light Zinc dialkyl dithiophosphate	64742-53-6 64742-55-8 64742-47-8 68457-79-4	≥50 - ≤75 ≥10 - ≤25 ≥10 - ≤25 <3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Product name Aero 40 Red	Product code	459670-US03	Page: 1/9
Version 4.02 Date of issue 04/19/2022.	Format US	Languag	je ENGLISH

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	o not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary				
Notes to physician	$\overline{\mathbf{r}}$ reatment should in general be symptomatic and directed to relieving any effects.			
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.			
Specific treatments	No specific treatment.			

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	Combustion products may include the following: carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protectiv	ve equipment and emergency procedures			
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.			
For emergency responders				
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).			
Methods and materials for con	tainment and cleaning up			
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.			
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.			

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Tut on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Sulfur compounds in this material may decompose when heated to release hydrogen sulfide gas which may accumulate to potentially lethal concentrations in enclosed air spaces. Vapor concentrations of hydrogen sulfide above 50 ppm, or prolonged exposure at lower concentrations, may saturate human odor perceptions so that the smell of gas may not be apparent. Exposure to concentrations of hydrogen sulfide vapor above 500 ppm may cause rapid death. Do not rely on the sense of smell to detect hydrogen sulfide.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Distillates (petroleum), hydrotreated light naphthenic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993	
Distillates (petroleum), hydrotreated light paraffinic	ACGIH TLV (United States).	
Product name Aero 40 Red	Product code 459670-US03 Page: 3/9	
Version 4.02 Date of issue 04/19/2022.	Format US Language ENGLISH	

Section 8. Exposure controls/personal protection			
	TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993		
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours. Issued/Revised: 1/2003		
Zinc dialkyl dithiophosphate	None.		

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Appropriate engineering controls	exposures are adequat considered after other f suitably evaluated. Per standards, be suitable f Your supplier of person selection and appropria organisation for standa Provide exhaust ventila concentrations below th The final choice of prote	hemicals should be assess ely controlled. Personal pro forms of control measures (rsonal protective equipment for use, be kept in good con al protective equipment sho at standards. For further in rds. tion or other engineering con heir respective occupational ective equipment will depen it all items of personal prote	tective equipment sl e.g. engineering cor should conform to a adition and properly i build be consulted for formation contact yo ontrols to keep the re exposure limits. Ind upon a risk asses	nould only be htrols) have been appropriate maintained. r advice on our national elevant airborne sment. It is
Environmental exposure controls	comply with the require fume scrubbers, filters	tion or work process equipm ments of environmental pro or engineering modifications nissions to acceptable level	otection legislation. I s to the process equ	n some cases,
Individual protection measures				
Hygiene measures	Wash hands, forearms eating, smoking and us Appropriate techniques	and face thoroughly after h ing the lavatory and at the e should be used to remove othing before reusing. Ensu- e workstation location.	end of the working p potentially contamin	eriod. ated clothing.
Eye/face protection	Safety glasses with side	e shields.		
Skin protection				
Hand protection	resistant gloves. Reco depends upon the cher condition of the gloves repeated chemical exp before they must be dis material handling pract intended application. G	if prolonged or repeated co mmended: Nitrile gloves. T nicals being handled, the co (even the best chemically re osures). Most gloves provid scarded and replaced. Beca ices vary, safety procedures loves should therefore be co a full assessment of the wo	he correct choice of ponditions of work and esistant glove will br e only a short time of ause specific work e s should be developed hosen in consultatio	protective gloves d use, and the eak down after of protection nvironments and ed for each
Body protection	Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.			
Other skin protection	Appropriate footwear a	nd any additional skin prote g performed and the risks ir		
Product name Aero 40 Red		Product code	459670-US03	Page: 4/9
Version 4.02 Date of issue 04	4/19/2022.	Format US	Languag	e ENGLISH

Section 8. Exposure controls/personal protection

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.	
Color	Red. [Dark]	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not applicable.	
Melting point/freezing point	Not available.	
Boiling point, initial boiling point, and boiling range	Not available.	
Flash point	Open cup: 110°C (23	0°F) [Cleveland]
Evaporation rate	Not available.	
Flammability	Not applicable. Based	d on - Physical state
Lower and upper explosion limit/flammability limit	Not available.	
Vapor pressure		Vapor Pressure

Vapor Pressure at 20°C Vapor pressure at 50°C kPa Ingredient name kPa Method mm Method mm Hg Hg Distillates (petroleum), <0.08 <0.011 ASTM D 5191 hydrotreated light paraffinic Distillates (petroleum), 0.23 to 0.031 to hydrotreated light 0.45 0.06 Zinc dialkyl 0 EU A.4 EU A.4 0 0 0 dithiophosphate Fatty acids, C16-18 and 0.42 3.15 FUA4 C18-unsatd., Me esters

Relative vapor density Density Solubility Partition coefficient: noctanol/water Auto-ignition temperature

Decomposition temperature Viscosity VOC Particle characteristics Median particle size

Not available.

<1000 kg/m3 (<1 g/cm3) at 15.6°C

insoluble in water.

Not applicable.

Ingredient name	°C	°F	Method
Distillates (petroleum), hydrotreated light	>220	>428	

Not available.

Kinematic: 13.2 mm²/s (13.2 cSt) at 37.7°C 570.3 g/l

Not applicable.

Product name	Aero 40 Red	
Version 4.02	Date of issue	04/19/2022.

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	No specific data.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Hydrogen Sulfide (H2S)

Section 11. Toxicological information

Information on toxicological effects

Aspiration hazard			
Name		Result	
Distillates (petroleum), hydrotreated light naphthenic Distillates (petroleum), hydrotreated light paraffinic Distillates (petroleum), hydrotreated light		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1	
Information on the likely routes of exposure	Routes of entry anticipated: Dermal, Inha	alation.	
Potential acute health effects			
Eye contact	No known significant effects or critical ha	zards.	
Skin contact	No known significant effects or critical ha	zards.	
Inhalation	Vapor inhalation under ambient conditions is not normally a problem due to low vapor pressure.		
Ingestion	ngestion 📈 known significant effects or critical hazards.		

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Inhalation	No specific data.
Ingestion	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure			
Potential immediate effects	Not available.		
Potential delayed effects	Not available.		
Long term exposure			
Potential immediate effects	Not available.		
Potential delayed effects	Not available.		
Potential chronic health effec	<u>ts</u>		
General	No known significant effects or critical hazards.		
Carcinogenicity	No known significant effects or critical hazards.		
Product name Aero 40 Red	Product code	459670-US03	Page: 6/9

Version 4.02 Date of issue 04/19/2022.

Format US

Section 11. Toxicological information

Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates Route ATE value Oral 203398.12 mg/kg

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

Not available.

Mobility in soil	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Liquid. insoluble in water.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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 local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
				l

 Product name
 Aero 40 Red
 Product code
 459670-US03
 Page: 7/9

 Version 4.02
 Date of issue 04/19/2022.
 Format US
 Language ENGLISH

Section 14. Transport information					
Packing group	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	
Additional information	-	-	-	-	

Special precautions for user Not available.

Transport in bulk according Not available. to IMO instruments

Section 15. Regulatory information

U.S. Federal regulations

United States inventory All components are active or exempted. (TSCA 8b)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification

Not applicable.

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Zinc dialkyl dithiophosphate	68457-79-4	1.326
Supplier notification	Zinc dialkyl dithiophosphate	68457-79-4	1.326

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC
New Jersey	The following components are listed: ZINC compounds
Pennsylvania	The following components are listed: ZINC COMPOUNDS
California Prop. 65	

MARNING: This product can expose you to chemicals including Ethylbenzene and cumene, which are known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Other regulations

Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	Not determined.
REACH Status	The company, as identified in Section 1, s

sells this product in the EU in compliance with the current requirements of REACH.

Product name Aero 40 Red	Product code	459670-US03 Page: 8/9
Version 4.02 Date of issue 04/19/2022.	Format US	Language ENGLISH

Section 16. Other information

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



<u>History</u>	
Date of issue/Date of revision	04/19/2022.
Date of previous issue	03/23/2022.
Prepared by	Product Stewardship
Key to abbreviations	ACGIH = American Conference of Industrial Hygienists ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS Number = Chemical Abstracts Service Registry Number GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN = United Nations UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-45-6, 64742-45-6, 64742-52-5, 64742-53-6, 64742-65-0, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Product name Aero 40 Red	Product code	459670-US03 Page: 9/9	
Version 4.02 Date of issue 04/19/2022.	Format US	Language ENGLISH	