

SAFETY DATA SHEET

Issue Date: April 9, 2025
Revision Date: June 10, 2026
Version: 3.2

Product: APEX Advanced Lubrication Code: VAPX SDS No.: APEX-032 Version: 3.2

1. IDENTIFICATION

Product Identifier	APEX Advanced Lubrication
SDS Number	APEX-032
Chemical Description	Proprietary high-performance multi-functional lubricant formulation. Contains petroleum base oil, extreme-pressure / anti-wear additive package (including a zinc additive and a chlorinated hydrocarbon additive), and a proprietary performance aid system. Formulated for high film strength and load-carrying performance.
Recommended Use	High-performance lubricant for metal surfaces, mechanical components, moving parts, and general-purpose metal lubrication. For professional and consumer use.
Recommended Restrictions	Not for food, drug, cosmetic, or internal use. Do not use near open flames or at temperatures above flash point. Keep out of reach of children. Obtain and read this SDS before use.
Manufacturer	Vendetta Chemical Solutions, LLC 6801 N FM 1788, Midland, TX 79707 Phone: 1-432-237-1451 Email: contact@vendettachems.com
Emergency Contact	1-855-596-6516 (24-hour emergency telephone)

2. HAZARD(S) IDENTIFICATION



GHS / OSHA HazCom 2024 Classification (29 CFR 1910.1200 / UN GHS Rev. 7):

Serious Eye Damage - **Category 1 (H318) | DANGER**

Aquatic Chronic - Category 1 (H410) | Very toxic to aquatic life with long lasting effects (from Proprietary Ingredient B)

All GHS Rev. 7 hazard classes screened. Not classified as flammable liquid (flash point 328 degrees F / 164.4 degrees C). Aspiration hazard not classified - measured KV 73.12 cSt at 40 degrees C (ASTM D445) is well above the 20.5 cSt GHS Rev. 7 threshold.

GHS Pictograms (GHS Rev. 7)

	
GHS05	GHS09

Signal Word	DANGER
Hazard Statements	H318 - Causes serious eye damage. H410 - Very toxic to aquatic life with long lasting effects.
P264 - Prevention	Wash hands and exposed skin thoroughly after handling.
P270 - Prevention	Do not eat, drink, or smoke when using this product.
P272 - Prevention	Contaminated work clothing must not be allowed out of the workplace.

P273 - Prevention	Avoid release to the environment.
P280 - Prevention	Eye protection is critical. Wear chemical splash goggles or face shield. Chemical-resistant gloves required.
P305+P351+P338 - Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER (1-800-222-1222) or physician.
P391 - Response	Collect spillage. Prevent release to environment.
P405 - Storage	Store locked up.
P501 - Disposal	Dispose of contents/container per all applicable regulations.
HNOC	Proprietary Ingredient B (chlorinated hydrocarbon additive) is very toxic to aquatic life with long lasting effects (H410). Prevent all environmental release. Proprietary Ingredient A (zinc dithiophosphate additive) - thermal decomposition produces H ₂ S, SO ₂ , phosphorus oxides, and zinc oxides. Use SCBA in fire situations.

OSHA HazCom 2024 / UN GHS Revision 7 Compliance Statement: This SDS is prepared in full compliance with OSHA HazCom 2024 (29 CFR 1910.1200, Federal Register Vol. 89 No. 98, effective May 20, 2024), adopting UN GHS Revision 7 (7th edition, 2017). All GHS Rev. 7 hazard classes screened. Original issue date: April 9, 2025.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Trade Secret Notice (29 CFR 1910.1200(i)):

The specific chemical identities and exact concentrations of three proprietary ingredient groups (A, B, and C) are withheld as trade secrets per 29 CFR 1910.1200(i) and UN GHS Rev. 7. Concentration ranges are provided per HazCom 2024 requirements. All known hazards of all ingredients are fully disclosed. Healthcare professionals requiring specific identities for medical treatment may contact the emergency number in Section 1.

Component	CAS	Wt %	Hazard Basis
Proprietary Ingredient A (zinc dithiophosphate EP/AW additive)	Proprietary	8-14%	H318 - Serious Eye Damage Cat 1 (DANGER) All hazards disclosed.
Proprietary Ingredient B (chlorinated hydrocarbon additive)	Proprietary	22-32%	H410 - Very toxic to aquatic life with long lasting effects. Full hazard disclosed.
Proprietary Ingredient C (lubricant base oil and performance aid system)	Proprietary	56-68%	Not classified as hazardous chemicals. No GHS hazard classifications transfer.

Trade Secret Disclosure - Proprietary Ingredients A, B, and C:

Ingredient A (zinc dithiophosphate EP/AW additive, 8-14%): IS classified. H318 (Serious Eye Damage Cat 1) is fully disclosed throughout this SDS. Thermal decomposition produces H₂S, SO₂, phosphorus oxides, and zinc oxides - see Sections 5 and 10. Subject to TSCA Section 12(b) export notification. Ingredient B (chlorinated hydrocarbon additive, 22-32%): IS classified. H410 (Very toxic to aquatic life with long lasting effects) is fully disclosed. Subject to TSCA Consent Order and SNUR - see Section 15. Ingredient C (lubricant base oil and performance aid system, 56-68%): NOT classified as hazardous chemicals. No GHS hazard classifications transfer.

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air. If breathing difficulty occurs, seek medical attention. Thermal decomposition/combustion products include H ₂ S, SO ₂ , phosphorus oxides, and zinc oxides - extremely hazardous; remove from area immediately.
Skin Contact	Remove contaminated clothing. Wash with soap and water for at least 15 minutes. If irritation develops or persists, seek medical attention. Launder contaminated clothing before reuse.
Eye Contact	CRITICAL - Causes serious eye damage (H318). Immediately flush with plenty of water for at least 15-20 minutes, holding eyelids open. Remove contact lenses immediately if present. Seek medical attention immediately - even if no symptoms are present. Chemical burns to the eye may not be immediately apparent. Call Poison Control: 1-800-222-1222.
Ingestion	Rinse mouth with water. Seek medical attention. Do not give anything by mouth to an unconscious person. For specific ingredient identity required for treatment, contact emergency number in Section 1.
Notes to Physician	Product contains Proprietary Ingredient A (zinc dithiophosphate EP additive, H318), Ingredient B (chlorinated hydrocarbon additive, H410), and Ingredient C (lubricant base/performance system, not hazardous). Eye injuries should be treated as chemical eye burns with immediate ophthalmology consultation. No specific antidote. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	328 degrees F (164.4 degrees C); Cleveland Open Cup (COC), ASTM D92. Measured on finished blend. Not classified as GHS Flammable Liquid. NFPA Class IIIB Combustible Liquid (flash point > 200 degrees F).
Flammability	Not classified as GHS Flammable Liquid.
Suitable Extinguishing	Dry chemical, CO ₂ , foam, water mist.
Unsuitable Media	Direct water stream.
Combustion Products	CO, CO ₂ , sulfur oxides (SO ₂ /SO ₃), hydrogen sulfide (H ₂ S), phosphorus oxides, zinc oxides, and organic combustion products. Ingredient B may produce hydrogen chloride (HCl) and chlorinated organics. Combustion gases are acutely toxic - SCBA mandatory.
Firefighter PPE	Full SCBA (positive pressure) and flame-retardant protective clothing.
Special Instructions	Cool exposed containers with water spray. Prevent fire runoff from entering waterways (H410).

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear PPE (see Section 8). Avoid skin and eye contact. Provide adequate ventilation. Keep upwind.
Environmental Precautions	H410 - Very toxic to aquatic life with long lasting effects. Prevent entry into drains, sewers, surface water, or groundwater. Report significant spills to NRC: 1-800-424-8802 as required.
Containment & Cleanup	Contain with non-combustible absorbent (sand, earth, vermiculite). Collect in sealed labeled containers. Do not flush to drain or waterway. Dispose per Section 13.

7. HANDLING AND STORAGE

Safe Handling	Read this SDS before use. Avoid all eye contact - H318 causes serious eye damage. Wear chemical splash goggles at all times when handling. Avoid skin contact. Wash hands thoroughly after handling. Do not breathe vapors. Avoid release to the environment. Keep away from heat, sparks, and open flames.
Application Guidance	Apply in well-ventilated areas. Use appropriate applicator to minimize skin and eye contact. Allow product to fully penetrate components before handling. Wipe away excess product after application.
Storage Conditions	Store in cool, dry, well-ventilated area in original sealed containers. Keep below 45 degrees C. Separate from strong oxidizing agents and strong acids/bases.
Empty Containers	May retain flammable and irritant residues. Do not cut, weld, or heat.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	CAS No.	OSHA PEL	ACGIH TLV
Proprietary Ingredient A (zinc dithiophosphate EP/AW additive)	Proprietary	No specific PEL. Control to lowest practicable level.	No TLV established.
Proprietary Ingredient B (chlorinated HC additive)	Proprietary	No specific PEL.	No TLV established.
Proprietary Ingredient C (lubricant base/performance)	Proprietary	5 mg/m3 (oil mist PNOR TWA)	5 mg/m3 (oil mist) 10 mg/m3 STEL

Engineering Controls	Good general ventilation is typically sufficient under normal use conditions. Local exhaust ventilation where misting or heating may occur. Eyewash stations must be immediately accessible wherever this product is used.
Eye/Face Protection	Chemical splash goggles required whenever this product is handled. Face shield recommended for bulk handling or where splash risk is elevated. Safety glasses alone are NOT adequate given the H318 classification.
Hand/Skin Protection	Chemical-resistant gloves (nitrile or neoprene). Chemical-resistant apron where splashing may occur.
Respiratory Protection	Not normally required under typical application conditions with adequate ventilation. SCBA required in fire or thermal decomposition scenarios.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Amber to dark amber liquid
Odor	Characteristic lubricant odor with odor control
pH	Not determined for finished blend

Specific Gravity	1.0575 at 60 degrees F (ASTM D1298). API Gravity: 2.3 (ASTM D287). Density: 8.82 lbs/gal. Product is denser than water (SG > 1.0); sinks in water; relevant for spill containment planning. Measured on finished blend.
Flash Point	328 degrees F (164.4 degrees C); Cleveland Open Cup (COC), ASTM D92. Measured on finished blend. Not a GHS Flammable Liquid (>> 93 degrees C threshold). NFPA Class IIIB Combustible Liquid (FP > 200 degrees F).
Flammability	Not classified as GHS Flammable Liquid (FP >> 93 degrees C). Not a DOT Combustible Liquid.
Evaporation Rate	Very slow at ambient temperature
Pour Point	16 degrees F (-9 degrees C); ASTM D97. Measured on finished blend.
Copper Corrosion Strip	1b (ASTM D130, 2 hours at 100 degrees F). Pass; slight tarnish only. Measured on finished blend.
Kinematic Viscosity	73.12 cSt at 40 degrees C / 104 degrees F (ASTM D445). 8.316 cSt at 100 degrees C / 212 degrees F (ASTM D445). Viscosity Index: 78 (ASTM D2270). Measured on finished blend. 73.12 cSt is well above the 20.5 cSt GHS Rev. 7 aspiration hazard threshold; aspiration hazard not classified.
Solubility (Water)	Low; petroleum and ester components insoluble. Product sinks in water.
Explosive Properties	Not explosive
Oxidizing Properties	Not oxidizing

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions of use and storage.
Chemical Stability	Stable under recommended storage conditions (below 45 degrees C).
Hazardous Reactions	Hazardous polymerization does not occur.
Conditions to Avoid	Heat, open flames, sparks above flash point. Temperatures above 150 degrees C. Contact with strong oxidizing agents, strong acids, or strong bases.
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases. Zinc dithiophosphate component is incompatible with strong acids which may release H2S.
Decomposition Products	CO, CO2, sulfur oxides (SO2/SO3), hydrogen sulfide (H2S), phosphorus oxides, zinc oxides (from Ingredient A), and HCl and chlorinated organic compounds (from Ingredient B). These gases are acutely toxic - use SCBA.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure	Eye contact (primary hazard), skin contact, inhalation, ingestion.
Acute Toxicity	Not classified for acute toxicity at mixture level. Zinc dithiophosphate component oral LD50 ~3600 mg/kg (rat) - low acute oral toxicity.

Aspiration Hazard	NOT classified. Measured kinematic viscosity 73.12 cSt at 40 degrees C (ASTM D445) is well above the 20.5 cSt GHS Rev. 7 aspiration hazard threshold. Aspiration hazard criteria are definitively not met.
Skin Corrosion/Irritation	Not classified at the mixture level. Repeat or prolonged contact may cause mild defatting. Wash skin thoroughly after handling.
Eye Damage/Irritation	Category 1 (H318) - Causes serious eye damage. Based on Proprietary Ingredient A (zinc dithiophosphate EP/AW additive, H318) at 8-14% of blend (above the 3% GHS Rev. 7 mixture cutoff). Chemical eye burns may not be immediately apparent and can cause permanent damage.
Resp. Sensitization	Not classified.
Skin Sensitization	Not classified.
Germ Cell Mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive Toxicity	Not classified.
STOT - Single Exposure	Not classified.
STOT - Repeated Exposure	Not classified.
Key Symptoms	Eyes: severe pain, tearing, redness, blurred vision - chemical eye burns may not be immediately apparent and can cause permanent damage. Skin: mild defatting with prolonged contact.

12. ECOLOGICAL INFORMATION

H410 - Very toxic to aquatic life with long lasting effects. Classification driven by Proprietary Ingredient B (chlorinated hydrocarbon additive, 22-32% of blend), classified as Aquatic Chronic Category 1. At 22-32% (well above the 0.1% x M=1 GHS cutoff), the blend inherits H410. Prevent all environmental release. Do not allow to reach waterways.

Ecotoxicity	H410 driven by Proprietary Ingredient B. Ingredient A (zinc dithiophosphate): Aquatic Chronic Cat 2 - superseded by Cat 1 from Ingredient B.
Persistence/Degradability	Proprietary Ingredient B has low inherent biodegradability. Petroleum fractions are not rapidly biodegradable.
Bioaccumulative Potential	Proprietary Ingredient B has significant bioaccumulation potential. Prevent all environmental release.
Other Adverse Effects	Proprietary Ingredient B contains chlorinated hydrocarbons with POP characteristics. Prevent all releases.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Evaluate per 40 CFR 261. Do not pour into drains, waterways, or soil (H410). Dispose per all applicable federal, state, and local regulations.
Waste Code	Evaluate per 40 CFR 261. Consult licensed hazardous waste hauler.

Contaminated Packaging	May retain residues. Follow label precautions. Do not cut, weld, or heat.
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14. TRANSPORT INFORMATION

DOT (U.S.)	Non-Bulk Packages (119 gallons / 450 L or less, including 55-gallon drums): Not regulated as a hazardous material for domestic highway/rail transport (49 CFR 171.4(c) non-bulk exception for marine pollutants). Bulk Packages (over 119 gallons / 450 L, including 275-gal and 330-gal IBCs/totes): Conservatively classified per the zinc dithiophosphate component supplier SDS as: UN3082 Environmentally Hazardous Substance, Liquid, N.O.S. (zinc dialkyldithiophosphate) Class 9 PG III Marine Pollutant. Required for bulk: UN3082 marking on IBC, Class 9 placard, Marine Pollutant mark, and shipping paper with emergency response information (49 CFR 172.604). Proprietary Ingredient B (chlorinated hydrocarbon additive) is NOT regulated for DOT, TDG, IMDG, or IATA transport per its supplier SDS (not a DOT Appendix B listed marine pollutant) and does not contribute to the transport classification of this blend. Flash point 328 degrees F (164.4 degrees C) - not a DOT combustible liquid.
TDG (Canada)	Not regulated for non-bulk ground transport. Bulk shipments follow the same conservative UN3082 Class 9 PG III classification as US DOT.
IATA	Not regulated as dangerous goods for air transport (flash point >> 60 degrees C).
IMDG	Non-bulk: not regulated. Bulk international maritime shipments: UN3082, Class 9, PG III applies conservatively per the zinc dithiophosphate component supplier SDS. Ingredient B (chlorinated hydrocarbon additive) is NOT regulated for IMDG transport per its supplier SDS. Contact Vendetta Chemical Solutions, LLC before international maritime shipment.
USPS Mail	Mailable in consumer sizes (e.g., 1 oz). Flash point 328 degrees F (164.4 degrees C) is above USPS Publication 52 flammable liquid restriction threshold. No USPS hazardous mail restrictions apply.
Special Precautions	Combustible liquid at elevated temperatures - keep away from ignition sources. H318 eye hazard - prevent container leaks during transport.

15. REGULATORY INFORMATION

OSHA HazCom 2024	This product IS a hazardous chemical under 29 CFR 1910.1200 (HazCom 2024, effective May 20, 2024). Classified: Serious Eye Damage Cat 1 (H318), Aquatic Chronic Cat 1 (H410). Worker and consumer right-to-know provisions apply.
Federal Hazardous Substances Act (FHSA - 15 U.S.C. 1261)	APEX Advanced Lubrication is a consumer hazardous substance under the FHSA (CPSC jurisdiction). H318 classification requires FHSA-compliant consumer product labeling: DANGER signal word; eye damage statement; first aid instructions; 'Keep out of reach of children'; Poison Control (1-800-222-1222); and manufacturer name and address.

TSCA	All proprietary ingredients are listed on or exempt from the U.S. EPA TSCA Inventory. TSCA compliance confirmed by Vendetta Chemical Solutions, LLC per 29 CFR 1910.1200(i). TSCA Sec. 5(e) Consent Order and SNUR: Proprietary Ingredient B is subject to TSCA Section 5(e) Consent Order (PMN P-12-0277 through P-12-0284) and TSCA Section 5(a) SNUR (40 CFR 721.11073). Permitted uses include use as an additive in lubricants (including metalworking fluids), in adhesives, coatings, rubber, and textiles. TSCA Sec. 12(b) Export Notification: Proprietary Ingredient B (present at 22-32%, well above the 1.0% threshold) requires export notification per export per country per 40 CFR 707.65(a)(2)(ii). Contact Vendetta Chemical Solutions, LLC for chemical identity information required for export compliance.
CERCLA / SARA 302	No CERCLA-listed hazardous substances above reportable quantity thresholds. No SARA 302 Extremely Hazardous Substances present.
SARA 311/312	Yes - Hazardous Chemical. Immediate Health Hazard: Yes (H318 - serious eye damage). Environmental Hazard: Yes (H410). Delayed/Chronic: No. Fire Hazard: No. Pressure: No. Reactive: No.
SARA 313 (TRI)	No SARA 313 reportable chemicals identified above de minimis concentrations. Zinc compounds: evaluate TRI reporting at your facility.
CWA (Clean Water Act)	H410 - Very toxic to aquatic life. Prevent release to waterways. Report spills reaching surface water to NRC: 1-800-424-8802.
US Consumer Product Label (GHS09 Note)	Per OSHA HazCom 2024, the GHS09 environmental pictogram is NOT required on physical US product labels. H410 hazard statement, P273, and P391 text ARE required on the label. GHS09 appears in Section 2 of this SDS as required.
Export Controls	APEX Advanced Lubrication is a commercial general-purpose metal lubricant. Verify applicability of Export Administration Regulations (EAR, 15 CFR 730-774) with qualified export counsel before any international shipment. TSCA Section 12(b) export notification for Proprietary Ingredient B is required for all export destinations; see TSCA entry above.
California Prop. 65	No current Prop. 65 listed substances identified at warning-threshold concentrations. Verify with Vendetta Chemical Solutions, LLC if required.

16. OTHER INFORMATION

Issue Date	April 9, 2025
Revision Date	June 10, 2026
Expiration Date	June 10, 2029
Version	3.2
Revision Notes	Version 3.2 (Revised June 10, 2026): Corrected physical property data based on finished-blend laboratory analysis. Specific Gravity corrected to 1.0575; Flash Point corrected to 328 degrees F; Pour Point updated to 16 degrees F (-9 degrees C, ASTM D97); kinematic viscosity confirmed at 73.12 cSt at 40 degrees C (ASTM D445). Aspiration Hazard (H304) classification removed; measured viscosity is well above the 20.5 cSt GHS Rev. 7 threshold. GHS08 pictogram and associated precautionary statements removed accordingly. Section 14 transport information updated to address bulk versus non-bulk classification. Original issue date: April 9, 2025.



Formulation Note	APEX Advanced Lubrication is a proprietary formulation manufactured by Vendetta Chemical Solutions, LLC. Specific composition is withheld as trade secret per 29 CFR 1910.1200(i). Physical property data is based on independent third-party laboratory analysis of the finished blend.
Prepared By	Vendetta Outdoors (Vendetta Chemical Solutions, LLC) - Safety & Compliance Department
SDS Prepared Per	OSHA HazCom 2024 (29 CFR 1910.1200, effective May 20, 2024); UN GHS Revision 7 (7th edition, 2017); 16-section format per GHS Rev. 7 Annex 4 and ANSI Z400.1/Z129.1; DOT 49 CFR Parts 171-180; EPA 40 CFR.
Abbreviations	CAS = Chemical Abstracts Service EP = Extreme Pressure AW = Antiwear VI = Viscosity Index COC = Cleveland Open Cup STOT = Specific Target Organ Toxicity GHS = Globally Harmonized System KV = Kinematic Viscosity
Disclaimer	The information in this SDS is based on data believed to be accurate as of the revision date. Physical properties are based on laboratory analysis. Classification is based on component data and GHS Rev. 7 mixture rules. Vendetta Chemical Solutions, LLC assumes no liability for damages resulting from abnormal use.

End of Safety Data Sheet

