


SAFETY DATA SHEET
APEX Superlube FC

Section 1: Identification

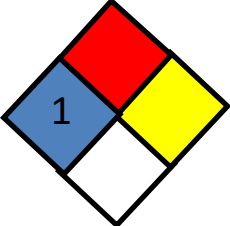
| | | |
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| Product Identifier | | |
| Product Name | APEX Superlube FC ® (formerly flow concentrate) | |
| Relevant identified uses of the substance or mixture and uses advised against | | |
| Recommended use | Hazard Communication & Compliance | |
| Details of the supplier of the safety data sheet | | |
| Manufacturer | APEX Advanced Technologies, LLC 4857-A West 130 th Street Cleveland OH 44135 United States Telephone (General) 615-459-0064 | |
| Emergency telephone number | | |
| Manufacturer | APEX Advanced Technologies, LLC | (216) 898-1595 |
| | CHEMTREC | (800) 424-9300 |

Section 2: Hazard Identification

| | | |
|---|---|--|
| United States (US) | | |
| According to OSHA 29 CFR 1910.1200 HCS | APEX Superlube FC | |
| Classification of the substance or mixture | | |
| OSHA HCS 2012 | <ul style="list-style-type: none"> H316: Causes mild skin irritation | |
| Label elements | | |
| OSHA HCS 2012 | | |
| | WARNING | |
| |  | |
| Hazard statements | <ul style="list-style-type: none"> H316: Causes mild skin irritation H320: May cause eye irritation. H335: May cause respiratory irritation. | |

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| Precautionary statements | | |
| | <ul style="list-style-type: none"> P402+404: Store in a dry place. Store in a closed container P403: Store in a well ventilated place. P210: Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. | |

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| | <ul style="list-style-type: none"> P235: Keep cool. |
| Prevention | |
| | <ul style="list-style-type: none"> P261: Avoid breathing dust. [As modified by IV ATP] P264: Wash hands thoroughly after handling |
| Response | |
| | <ul style="list-style-type: none"> P370+P378: In case of fire: Use appropriate media for extinction. P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P353: Rinse skin with water/shower. P332+P313: If skin irritation occurs: Get medical advice/attention. |
| Storage/Disposal | |
| | <ul style="list-style-type: none"> P402+404: Store in a dry place. Store in a closed container P403: Store in a well ventilated place. P210: Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. P235: Keep cool. |
| Other information | |
| NFPA |  |

Section 3 - Composition/Information on Ingredients

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| Substances | | |
| | Material does not meet the criteria of a substance. | |
| Mixtures | | |
| Component | CAS # | % by Wt. |
| Solid saturated hydrocarbons | 68153-22-0 | 70% (min) |
| Hydrated, Amorphous Silica | 112929-00-8 | 30% (max) |
| Stearic wax mixture | 110-30-5 | 20% (max) |

Section 4: First-Aid Measures

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| Description of first aid measures | Call for emergency medical care. Keep victim warm and quiet. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |
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| Inhalation | Move patient to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult. |
| Skin | Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin. Wash exposed area thoroughly with soap and water. Seek medical attention if irritation develops. |
| Eye | Exposed eyes should be irrigated with water for at least 20 minutes. Seek medical attention if irritation develops. |
| Ingestion | If swallowed, give 3-4 glasses of water but do not induce vomiting. If vomiting does occur, give fluids again. Get medical attention to determine whether vomiting or evacuation of the stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person. Most important symptoms and effects, both acute and delayed |
| | Refer to Section 11 - Toxicological Information. |
| Notes to Physician | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. |

Section 5: Fire-Fighting Measures

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| Extinguishing Media | | |
| Suitable Extinguishing Media | Flammable Properties: | Not available |
| | Flammable Limits: | Not available |
| | Auto-ignition Temperature: | Not available |
| | Hazardous Combustion Products: | Not available |
| Extinguishing Media and Fire Fighting Instructions | Small fires: | Water, carbon monoxide, dry chemical powder, dry sand, or foam. |
| | Large Fires: | Water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do it without risk. Do not use straight streams. Dike fire control water for later disposal; do not scatter material. |
| | | Wear positive pressure, self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations. |

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

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| Personal Precautions | Wear appropriate protective equipment including respiratory protection as conditions warrant. |
| Methods and material for containment and cleaning up | |
| Containment/Clean-up Measures | If material is released or spilled, use vacuum for clean-up and place in closed containers for disposal. |

Section 7 - Handling and Storage

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| Precautions for safe handling | |
| Handling | Do not breathe dust. Avoid contact with eyes, skin and clothing. |
| Conditions for safe storage, including any incompatibilities | |
| Storage | Store in Keep container closed. Keep away from incompatible materials. Store in a cool, dry area away from ignition sources and oxidizers. |
| Incompatible Materials or Ignition Sources | |
| | Store in a cool, dry area away from ignition sources and oxidizers. |

Section 8 – Exposure Controls/Personal Protection

Control parameters

| OSHA Hazardous Components (29 CFR1910.1200) | | | |
|---|---------------------|---------------------|-----------------------|
| Component | Exposure Limits | | |
| | OSHA | ACGIH | NIOSH |
| Solid saturated hydrocarbons | 5 mg/m ³ | 2 mg/m ³ | |
| Hydrated, Amorphous Silica | 15 mppcf | 1 mg/m ³ | 2.5 mg/m ³ |
| Stearic wax mixture | | | |


Workplace Exposure Limits

Chemical specific exposure limits have not been established for the components of this material. However, due to the material's physical characteristics, it may become a nuisance dust hazard. The workplace exposure limits for nuisance dusts are:

- 15 mg/m³ OSHA PEL (total particulates not otherwise classified)
- 5 mg/m³ OSHA PEL (respirable fraction particulates not otherwise classified)
- 10 mg/m³ ACGIH TLV (total particulates not otherwise classified)

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| Exposure Controls | |
| Engineering Measures/Controls | Local exhaust ventilation should be applied whenever there is an incidence of point source emissions or dispersion of regulated contaminants in the work area. Ventilation control of the contaminant as close to its point of generation is both the most economical and safest method to minimize personnel exposure to airborne contaminants. |
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| Personal Protective Equipment | |

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| Pictograms |  |
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| Respiratory | Where exposure may exceed OSHA or ACGIH permissible air concentrations, a dust respirator is required. |
| Hands | Gloves are appropriate for exposure that exceeds permissible limits. |
| Eye/Face | Use chemical goggles where eye contact may occur. |

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| General Industrial Hygiene | Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas. |
| Environmental Exposure Controls | Follow best practices for the site management and disposal of waste. Avoid release to the environment. |

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

STEL = Short Term Exposure Limits are based on 15-minute exposures OSHA

STEV = Short Term Exposure Value

Section 9 - Physical and Chemical Properties

Material Description

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|------------------------|------------------|------------------|--------------|
| Appearance/Description | Off-White powder | Particulate Size | Not relevant |
| Color | Off-white | Particulate Type | Not relevant |
| Odor | Odorless | Physical Form | Solid |
| Odor Threshold | N/A | Taste | Data lacking |

General Properties

| | | | |
|---------------------------|---------|-------------------------------------|------------------------|
| Auto-ignition | N/A | Melting Point | 80 - 100° C Initiation |
| Boiling Point | N/A | Octanol/Water Partition coefficient | Data lacking |
| Decomposition Temperature | N/A | pH | Neutral |
| Evaporation Rate | N/A | Specific Gravity/Relative Density | 1.26 g/cc |
| Flammability (solid, gas) | N/A | Vapor Density | N/A |
| Flash Point | >180° C | Vapor Pressure | N/A |
| Heat of Decomposition | | Viscosity | N/A |
| LEL | N/A | Water Solubility | Insoluble |

Section 10 – Stability and Reactivity

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| Chemical Stability | Stable at room temperature |
| Possibility of hazardous reactions | Hazardous polymerization will not occur. |

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| Possibility of hazardous reactions | Oxidizers |
| Incompatible materials | N/A |
| Hazardous decomposition products | Carbon monoxide and carbon dioxide. Other products may be generated. Use in well-ventilated areas and avoid breathing or contacting solid and gaseous products of decomposition. |

Section 11 - Toxicological Information

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| Information on toxicological effects | |
| Reported Human Effects: | Products/Similar Product – No human data are available for this product. |
| Reported Animal Effects: | Product/Similar Product - Laboratory tests have been performed with small animals via inhalation of precipitated silica dust up to 126 mg/m ³ for periods from 6 months to 2 years. Although precipitated silica was temporarily deposited in the animal's lungs, most of the deposited material was cleared soon after the dust exposure ended. |
| Ingredient Chemicals listed as carcinogens by: | |
| National Toxicology Program (NTP): | None |
| LARC Monographs: | None |
| OSHA: | None |
| Route(s) of entry/exposure | Inhalation, Skin, Eye, Ingestion |
| Inhalation: | |
| Acute (Immediate) | May cause irritation as a nuisance dust |
| Chronic (Delayed) | No data available |
| Skin: | |
| Acute (Immediate) | Causes skin irritation |
| Chronic (Delayed) | Repeated and prolonged exposure may cause dermatitis |
| Eye: | |
| Acute (Immediate) | May cause mild eye irritation |
| Chronic (Delayed) | No data available |
| Ingestion: | |
| Acute (Immediate) | Not expected to be toxic upon ingestion but may cause digestive blockage. |
| Chronic (Delayed) | No data available |

Section 12 - Ecological Information

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| Toxicity | Material data lacking |
| Persistence and degradability | Material data lacking |
| Bio-accumulative potential | Material data lacking |
| Mobility in Soil | Material data lacking |
| Other adverse effects | Not available |
| Other Information | Not available |
| Silica | |
| EC ₀₁ : >1,000 ppm (daphnia magna) (24-hour acute immobilization test) | Slight to very low toxicity. |
| EC ₀₁ : >1,000 ppm (rainbow trout) (4- day static study) | Slight to very low toxicity |
| EC ₀₁ : >1,000 ppm (freshwater fish) (96-hour static acute toxicity study) | Slight to very low toxicity |

Section 13 - Disposal Considerations

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| Waste treatment methods | |
| Product waste | Care should be taken to avoid dust creation during disposal operations. |
| Packaging waste | Material data lacking |

Section 14 - Transport Information

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| Special precautions for user | None specified |
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Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

| EPA CAS Number | Chemical Name | Sec. 302 (EHS) TPQ (in pounds) ¹ | EHS RQ (in pounds) ² | CERCLA Reportable Quantity (in pounds) ³ | Subject to Sec. 313 Reporting ⁴ |
|-------------------|-----------------------------|---|------------------------------------|--|---|
| 68153-22-0 | Solid saturated hydrocarbon | Not listed | Not listed | Not listed | Not listed |
| 112929-00-8 | Hydrated, Amorphous Silica | Not listed | Not listed | Not listed | Not listed |
| 110-30-5 | Stearic wax mixture | Not listed | Not listed | Not listed | Not listed |

¹ The presence of EHSs in quantities in excess of the Threshold Planning Quantity (TPQ) requires certain

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emergency planning activities to be conducted. (Appendix B to 40 CFR 355)

² Releases of reportable quantities (RQ) of EHSs are subject to state and local reporting under section 304 of SARA Title III (EPCRA). (40 CFR 302.4)

³ Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under CERCLA. (Appendix A to 40 CFR 172.101)

⁴ Emissions, transfers, and waste management data for chemicals listed under section 313 must be reported annually as part of the community right-to-know provisions of SARA Title III (EPCRA) (40 CFR Part 372).

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| Section 16 - Other Information |
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| Last revision date | 5/7/15 |
| Preparation date | 5/7/15 |

Disclaimer/statement of liability

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.
