MSDS# 2112-A
Product Code: H.SC
Date of Preparation: 11/22/13 Rev. A

Material Safety Data Sheet

SECTION 1 IDENTIFICATION

Product Name: SPECTRO™ Suspension Cleaner

Manufacturer:
Intercontinental Lubricants Corp./
Spectro Oils of America
993 Federal Road
Brookfield, CT 06804
(203) 775-1291 Fax: (203) 775-8720

MSDS Date of Preparation: 11/22/13

SECTION 2 PRODUCT COMPONENTS

INGREDIENTS	CAS#.	WT.%
Heptane, branched, cyclic and linear	426260-76-6	60-100
Isopropyl Alcohol (Isopropanol)	67-63-0	1-5
Carbon Dioxide	124-38-9	1-5

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a clear, colorless liquid with a hydrocarbon odor in an aerosol container. Extremely flammable aerosol (Flash Point 17.6°F). May cause eye and skin irritation. Breathing vapors may cause respiratory irritation and central nervous system effects including headache, dizziness or nausea. Harmful or fatal if swallowed. Accidental ingestion may cause gastrointestinal effects with irritation, nausea, vomiting, dizziness, coma and death. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

SECTION 4 EMERGENCY and FIRST AID PROCEDURES

EYE CONTACT: Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

SKIN CONTACT: Remove contaminated clothing and launder before reuse. Wash thoroughly with soap and water. Get medical attention if irritation persists.

INHALATION: Remove victim to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

INGESTION: Unlikely due to aerosol container. Never give anything by mouth to an unconscious or drowsy person. Do not induce vomiting. Get immediate medical attention by calling a Poison Control Center or hospital emergency department.

SECTION 5 FIRE and EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA: Water fog, alcohol foam, dry chemical or carbon dioxide. Cool fire exposed containers with water.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Use shielding to protect against bursting cans.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable. Contents under pressure. Keep away from heat and open flames. Vapors are heavier than air and may travel to a remote ignition source and flash back. Containers may rupture or explode at temperatures above 120^{o}F.

SECTION 6 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate protective equipment. Remove all sources of ignition. Ventilate area. Collect material for disposal using non-combustible absorbent material and place in a container suitable for flammable waste. Report spill as required by local and federal regulations.

SECTION 7 HANDLING and STORAGE

Extremely Flammable Aerosol.

Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Use with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and launder before re-use. No smoking in use or storage area.

Protect containers from physical damage. Store in a cool, well ventilated area at temperatures below 120°F. Store away from direct sunlight. Do not incinerate containers.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all MSDS precautions in handling empty containers.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	CAS#.	EXPOSURE LIMITS .
Heptane, branched, cyclic and linear (as heptane)	426260-76-6	500 ppm TWA OSHA PEL 400 ppm TWA ACGIH TLV 500 ppm STEL ACGIH TLV
Isopropyl Alcohol (Isopropanol)	67-63-0	400 ppm TWA OSHA PEL 200 ppm TWA ACGIH TLV 400 ppm STEL ACGIH TLV
Carbon Dioxide	124-38-9	5,000 ppm TWA OSHA PEL 5,000 ppm TWA ACGIH TLV 30,000 ppm STEL ACGIH TLV

RESPIRATORY PROTECTION: None needed under normal use conditions with adequate ventilation. If the occupational exposure limit is exceeded use a NIOSH approved respirator with organic vapor cartridges. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

VENTILATION: Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If the recommended exposure limit is exceeded, an explosion-proof mechanical ventilation such as local exhaust may be required.

GLOVES: Nitrile or other impervious gloves are recommended where prolonged or repeated skin contact is likely.

EYE PROTECTION: Safety goggles recommended to prevent eye contact.

OTHER PROTECTIVE EQUIPMENT: Impervious apron, boots and other clothing are recommended if needed to avoid prolonged/repeated skin contact. Suitable washing facilities should be available.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, colorless liquid, hydrocarbon odor.

Odor threshold: 43 ppm (isopropanol) 230 ppm (heptane)	**pH:** Not available
Melting point/freezing point: Not available	**Initial boiling point and boiling range:**
Flash point: 17.6°F/ -8°C	**Evaporation rate:**
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 2.0%	**UEL:** 12.7%
Vapor pressure: Not available	**Vapor density:** >1
Relative density: 0.7	**Solubility in water:** Negligible
Partition coefficient: n-octanol/water: Not applicable	**Auto-ignition temperature:** 750.2°F / 399°C
Decomposition temperature: Not available	**Viscosity:** <14 cST @40°C
VOC: 100%	
Aerosol Protection Level (NFPA 30B): Level 3	**Flame Projection:** >29.4 inches (>100 cm)
Flashback: Yes	

SECTION 10 STABILITY and REACTIVITY

STABILITY: This material is stable.
CONDITIONS TO AVOID: Avoid heat, sparks and open flames. Avoid exposure to temperatures above 120°F.
INCOMPATIBILITY: Strong oxidizing agents and acids. Moist carbon dioxide is corrosive to most metals because of the formation of carbonic acid.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield carbon monoxide and carbon dioxide.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:
INHALATION: Excessive inhalation of vapors or mists may cause respiratory tract irritation and central nervous system effects including headache, nausea, dizziness, drowsiness, weakness, confusion, narcosis, unconsciousness and coma.

SKIN CONTACT: Skin contact may dry and irritate skin. Prolonged skin contact may cause defatting of the skin and dermatitis.

EYE CONTACT: Vapors may cause irritation. Contact with liquid may cause severe irritation with redness and pain.

INGESTION: Unlikely due to aerosol container, however swallowing may cause gastrointestinal disturbances including abdominal pain, belching, nausea, vomiting, dizziness, drowsiness, coma or death. May cause central nervous system depression with unsteady gait and sedation. Aspiration into the lungs may occur during ingestion or vomiting may cause lung damage which may be fatal.

CHRONIC EFFECTS OF OVEREXPOSURE: Reports has associated repeated and prolonged occupational exposure to various organic solvents with internal organ, brain and nervous system damage. Prolonged or repeated contact with this product may possibly lead to irritation or dermatitis. Intentional misuse by deliberately concentrating and inhaling the product may be harmful or fatal. The use of alcoholic beverages may increase toxic effects.

CARCINOGENICITY: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with chronic skin and nervous system disorders may be at increased risk from exposure to this material. Breathing of vapors and/or mists may aggravate respiratory disorders.

ACUTE TOXICITY VALUES:

Heptane, branched, cyclic and linear: Oral rat LD50 >5000 mg/kg; Inhalation rat LC50 29.29 mg/L/4 hr; Dermal rabbit LD50 >2000 mg.kg (structurally similar chemical)
Isopropanol: Oral rat LD50 5.84 g.kg; Inhalation rat LC50 >10,000 ppm/6 hr; Dermal rabbit LD50 16.4 mL/kg
Carbon Dioxide: No toxicity data available

None of the components caused mutagenic activity in bacterial and animal studies.
None of the components are known to cause sensitization in animals or humans.
None of the components have been shown to cause reproductive or developmental effects in studies with laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

This product is toxic to aquatic life with long lasting effects based on the GHS criteria.

Ecotoxicity:
Heptane, branched, cyclic and linear: 96 hr LL50 Oncorhynchus mykiss 5.738 mg/L; 48 hr EC50 daphnia magna 1.5 mg/L
Isopropanol: 96 hr LC50 Pimephales promelas 10000 mg/L; 24 hr EC50 daphnia magna > 10000 mg/L
Carbon dioxide: Not data available

Persistence and degradability: Heptane is readily biodegradable (>60% in 28 days). Isporopanol is readily biodegradable (78% in 20 days).

Bioaccumulative potential: Heptane has a calculated BCF of 2000. Isopropanol has a calculated BCF of 3.

Mobility in soil: Heptane is immobile in soil. Isopropanol is highly mobile in soil.

Other adverse effects: None known.

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: This product is RCRA Hazardous Waste (Ignitable) if discarded in the purchased form. Dispose in accordance with federal, state and local regulations. Do not incinerate containers. Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT		Consumer Commodity			No
TDG		Consumer Commodity			No
IMDG	UN1950	Aerosols, Flammable	2.1		Yes
IATA	UN1950	Aerosols, Flammable	2.1		Yes

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD CLASSIFICATION: Flammable, pressure hazard, irritant,

EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.

EPA SARA 311 HAZARD CLASSIFICATION: Acute heath, chronic health, fire hazard, sudden pressure release.

EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

None

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

WHMIS CLASSIFICATION: Class B-5: Flammable aerosol; Class D-2, Subdivision B: Toxic material causing other chronic effects.

EU CLASSIFICATION: Highly Flammable (F), Harmful (Xn), Dangerous for the Environment (N)
EU RISK AND SAFETY PHRASES: R11, R38, R50/53, R65, R67, S2, S16, S23, S51, S61

TOXIC SUBSTANCES CONTROL ACT: All of the components of this product are listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: This product contains the following chemicals which are known to the State of California to cause cancer: None

Canada: All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

Philippines: All of the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances List.

Taiwan: All of the components of this product are listed on the new and Existing Chemical Inventory of Taiwan.

SECTION 16: OTHER INFORMATION

NFPA Rating: Health: 2 Fire: 4 Reactivity: 0