SECTION 1 Identification

Product Name: CONOSTAN® S21+K+Li Blended standard

Matrix: Petroleum hydrocarbon

Intended Use: Instrument Calibration

Catalogue Number: 150-021-065

Recommended Use: Laboratory Chemical

Instrument Calibration. This product is intended for laboratory testing. This product shall be used by trained personnel only.

Restriction on use: Do not use this product outside of a laboratory. This product should not be used by untrained personnel.

Manufacturer/ Supplier:

Canada/ International	USA	France	Germany
21 800 Clark-Graham	3rd Party Distribution Center	12 Ave du Québec	Alte Marktoberdorf er
Baie d'Urfé, (Montréal)	348 Route 11, Champlain,	Bât Iris,	Straße 14, 87616
Québec, H9X 4B6	N.Y. 12919-4816	91140 Villebon sur Yvette,	Marktoberdorf
Canada	USA	France	Germany
Phone: +1 (800) 361-6820	Phone: +1 (800) 361-6820	Phone: +33 (0) 1 69 18 71 17	Phone: +49 (0) 8342-89560-61
Fax: +1 (800) 253-5549	Fax: +1 (800) 253-5549	Fax: +33 (0) 1 60 92 05 67	Fax: +49 (0) 8342-89560-69

CORPORATE: Phone: +1 (514) 457-0701 | Fax: +1 (514) 457-4499

www.scpscience.com | sales@scpscience.com

In the event of a transport emergency, call Chemtrec (24 h): 1-703-741-5970 (CHEMTREC)

California Poison Control System: (800) 356-3129

In the event of medical emergency, call your local poison center or equivalent.

SECTION 2 Hazards Identification

Emergency Overview

GHS

Harmonized Classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

Classification: Not Classified

Symbols:



Signal Word: Not Classified

Hazard Statements Not Classified

Precautionary Statements Not Classified

Other Hazards: No information found.

SECTION 3 Composition and Information on Ingredients

CAS No.	Chemical Name	% Weight	*Classification* ((EC) No 1272/2008)

8042-47-5	White Mineral Oil (75 cSt)	100%	Not classified
None	Oil Mist, If generated	---	None

The following materials are present at less than 0.1%
Blended Alkyl aryl Sulfonate or as indicated, including

Silver alkyl aryl Sulfonate	- % as Ag
Aluminum alkyl aryl Sulfonate	- % as Al
Boron amine alkyl aryl Sulfonate	- % as B
Barium alkyl aryl Sulfonate	- % as Ba
Calcium alkyl aryl Sulfonate	- % as Ca
Cadmium alkyl aryl Sulfonate	- % as Cd
Chromium alkyl aryl Sulfonate	- % as Cr
Copper alkyl aryl Sulfonate	- % as Cu
Iron alkyl aryl Sulfonate	- % as Fe
Potassium alkyl aryl Sulfonate	- % as K
Lithium alkyl aryl Sulfonate	- % as Li
Magnesium alkyl aryl Sulfonate	- % as Mg
Manganese alkyl aryl Sulfonate	- % as Mn
Molybdenum amine alkyl aryl Sulfonate	- % as Mo
Sodium alkyl aryl Sulfonate	- % as Na
Nickel alkyl aryl Sulfonate	- % as Ni
Alkyl Phosphate	- % as P
Lead alkyl aryl Sulfonate	- % as Pb
Silicon alkyl aryl Sulfonate	- % as Si
Tin alkyl aryl Sulfonate	- % as Sn
Titanium alkyl aryl Sulfonate	- % as Ti
Vanadium alkyl aryl Sulfonate	- % as V
Zinc alkyl aryl Sulfonate	- % as Zn

A typical concentration of above metallic compounds is 0 - 815 ppm.
Refer to container for the exact concentration.

1% = 10,000 PPM.

SECTION 4 First Aid Measures

In case of contact:

Eye: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

Skin: Remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

Ingestion: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Inhalation: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Most important Symptoms: May be harmful or fatal if swallowed.

Notes to Physician/Doctor:	Acute aspirations of large amounts of oil-laden material may produce serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. Treat symptomatically.

SECTION 5 Fire-fighting Measures

Fire Hazard Summary:	For fires beyond the incipient stage, emergency responders in the immediate hazard areas should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (See Section 8). Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from the immediate hazard area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.
Extinguishing Media:	Dry chemical, carbon dioxide, foam or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.
Extinguishing Media to be Avoided:	No information found.
Combustion and Thermal Decomposition Products:	This material may burn, but it will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.
Special protective equipment and precautions for fire-fighters:	Firefighters should wear self-contained respirator and full protective gear.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION

Health:	0 – Poses no health hazard, no precautions necessary
Flammability:	1 – Must be heated before ignition can occur.
Reactivity:	0– Normally stable, even under fire exposure conditions, and is not reactive with water
Special Hazard:	

SECTION 6 Accidental Release Measures

Spill Precautions:	Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (See Section 8).

	Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways. Dike far ahead of the spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify fire authorities and appropriate federal, state and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (Phone No.: 800-424-8802). Personal precautions: Wear appropriate protective equipment including respiratory protection as conditions warrant (See Section 8). Protective equipment and emergency procedures: Ensure adequate ventilation. Evacuate personnel to safe areas.
Clean-up:	SMALL SPILLS: Not applicable. LARGE SPILLS: Evacuate area. Contact fire and emergency services and supplier for advice.

SECTION 7 Handling and Storage

Handling:	Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personnel hygiene practices. "Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum re-conditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.
Storage:	Keep container(s) tightly closed. Use and store this material in a cool, dry, well-ventilated area, away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (See Section 10). Protect container(s) against physical damage.
Additional Information:	The mixture is intended for use in a laboratory. The mixture as supplied is stable under normal laboratory conditions.

SECTION 8 Exposure Controls and Personal Protection

Exposure guidelines	
ACGIH:	Oil Mist, If generated- 5 mg/m3 (TWA), 10 mg/m3 (STEL).
NOTE:	State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.
Preventive Measures:	Combustible liquid and vapor. Keep away from heat sparks, flames, static electricity or other sources of ignition.
Eye / Face protection:	Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended. Depending on conditions of use, a face shield may be necessary.
Skin protection:	The use of gloves impervious to the specific material handled is advised to prevent skin contact and possible irritation (see manufacturers literature for information on permeability). Examples of approved materials are nitrile, neoprene.

Inhalation / Ventilation:	A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposures limits (See exposure guidelines). Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are unknown, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Personal Hygiene:	Do not eat or drink in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Appropriate Engineering Controls:	If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (See exposure guidelines), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (See appropriate electrical codes).
Other Protective Equipment:	Eye wash and quick-drench shower facilities should be available for flushing eyes and skin. Impervious clothing should be worn as needed. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible. Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear / Colorless
Odor	Hydrocarbon
Property Values	
pH VALUE	No data available
Melting Point/Range	No data available
Boiling Point/Range	>500°F / >315°C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapor Pressure (mmHg)	No data available
Vapor Density	No data available
Bulk Density	c. 6.25 lbs/gal
Specific Gravity	c. 0.6 – 0.9 @ 60°F (15.6°C)
Water Solubility	Not Soluble
Partition coefficient: n-octanol/water	No data available

Auto ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	C. 70 cSt
Flash Point	No data available

SECTION 10 Stability and Reactivity

Reactivity:	No information found.
Chemical stability:	Stable at room temperature and conditions of use.
Incompatible Materials:	Avoid contact with strong oxidizing agents.
Conditions to avoid:	High temperatures. Avoid all possible sources of ignition (See Sections 5 and 7).
Hazardous Decomposition Products:	Combustion can yield carbon, carbon oxides.
Hazardous Polymerization:	Will not occur.

SECTION 11 Toxicological Information

Potential Health Effects

Eye:	Contact may cause mild eye irritation.
Skin:	Contact may cause irritation.
Ingestion:	No information found.
Inhalation:	Overheating of product may produce vapors which can cause respiratory irritation, dizziness and nausea.

Effects of Short-Term (Acute) Exposure

LD50/LC50:	No information found.

Effects of Long-Term (Chronic) Exposure

Respiratory or skin sensitization:	No information found.
Germ Cell Mutagenicity:	Testing of various nickel compounds has produced positive results in assays for gene mutation, chromosomal aberration and DNA damage in both bacterial and mammalian cells.
Reproductive Toxicity:	Administration of certain organic lead compounds during pregnancy has caused developmental toxicity (neurobehavioral effects) in laboratory animals. Administration of nickel acetate during pregnancy has resulted in birth defects in sheep, hamsters and mice. Developmental defects affects primarily the eyes were noted in laboratory animals exposed to nickel carbonyl via inhalation during pregnancy. Administration of soluble inorganic salts of nickel during pregnancy resulted in limited evidence of developmental toxicity. Increased fetal death, decreased litter size and reduced fetal weights were noted, but only at concentrations that also compromised the health status of the mothers. There is inconclusive evidence for the developmental toxicity of insoluble inorganic salts (e.g., oxides and sulfides).
STOT- Single exposure	No definitive information found for target organs toxicity short term exposure.
STOT- Repeated exposure	Chronic overexposure to organic cadmium can result in renal tubular dysfunction, proteinuria and less commonly, glomerular dysfunction, disturbance of calcium metabolism and renal stone formation. Chronic overexposure to organic lead compounds is associated with

	toxicity of the hematopoietic, vascular, male reproductive, nervous systems and of the kidney. Hematological effects include anemia, decreased hemoglobin and increased urinary porphyrins. Vascular effects are manifested as high blood pressure. Neurotoxic effects may involve both sensory and motor neurons and may include encephalopathy and peripheral neuropathy. Kidney damage is characterized by nephropathy, interstitial fibrosis and tubular damage. Effects on the male reproductive system may include decreased sperm count, motility and testicular atrophy. Chronic exposure to nickel and certain nickel compounds can cause rhinitis, sinusitis, allergies, cancer of the nasal sinus cavities and lungs. Nasal polyps, perforation of the nasal septum and chronic pulmonary irritation have also been reported. There is limited evidence from laboratory animal studies that nickel sulfate and nickel chloride can adversely affect the male reproductive system.
Aspiration Hazard:	No information found.
Carcinogenicity:	Not Listed as a carcinogen by NTP, IARC or OSHA. The international Agency for Research on Cancer has determined that cadmium metal is a Group 1 human carcinogen. EPA has classified cadmium as a "probable carcinogen" based on limited human evidence, but sufficient evidence in laboratory animals. It has been classified as a known carcinogen by NTP. Chronic oral ingestion of various inorganic lead compounds resulted in increased renal tumors in laboratory animals. Lead and inorganic lead compounds have been identified as carcinogens by NTP, IARC and OSHA. Organic lead compounds have not been identified as a carcinogen by NTP, IARC or OSHA. There is insufficient evidence in humans for the carcinogenicity of nickel sulfate and for nickel compounds (sulfides and oxides) encountered in nickel refining. There is sufficient evidence in animals for the carcinogenicity of metallic nickel, nickel monoxides, nickel hydroxides and crystalline nickel sulfides and limited evidence in animals for other nickel compounds 9e.g., alloys, arsenides and nickel carbonyl). Occupational exposure has been associated with cancer of the lung and nasal cavity. Nickel and nickel compounds have been identified as carcinogens by NTP and IARC. No definitive information found for the other components on carcinogenicity, mutagenicity, target organs or developmental toxicity.
Signs and symptoms of exposure:	
Overexposure:	Effects of overexposure may include diarrhea, irritation of the digestive tract and irritation of the respiratory tract.

SECTION 12 Ecological Information

Eco- toxicity:	no information found for this preparation.
Mobility in soil:	no information found for this preparation.
Persistance and degradability:	no information found for this preparation.
Bioaccumulative potential:	no information found for this preparation.

SECTION 13 Disposal Considerations

Product disposal:	This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity prior to

	disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material. Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum re-conditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.
Contaminated packaging:	Dispose of as unused product.

SECTION 14 Transport Information

IMDG (sea):	Not Regulated As A Hazardous Material Or Dangerous Goods For Transportation By This Agency.
UN-Number:	
Class:	
Packing group:	
Proper shipping name:	
Marine pollutant:	
ADR/DOT (road):	Not regulated Material is unregulated unless in container of 3500 gal or more then provisions of 49 CFR Part 130 apply for land shipment.
UN-Number:	
Class:	
Packing group:	
Proper shipping name:	
Marine pollutant:	
ICAO/IATA (air):	Not Regulated As A Hazardous Material Or Dangerous Goods For Transportation By This Agency.
UN-Number:	
Class:	
Packing group:	
Proper shipping name:	
Marine pollutant:	

SECTION 15 Regulatory Information

US Federal:	
TSCA:	All components are listed on the TSCA Inventory.
US State:	
California Prop. 65:	Warning: This material contains the following chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5): Component: Cadmium and Cadmium Compounds

	Effect:	Developmental and Reproductive Toxicant
	Component:	Lead and Lead Compounds
	Effect:	Cancer
	Component:	Nickel and Certain Nickel Compounds
	Effect:	Cancer

Canada

WHMIS Classifications: Not Applicable

EU

Classifications: Not Applicable

Risk Phrase(s): Not Applicable

SECTION 16 Other Information

Revised: February 10, 2023

Date of previous revision(s): Not applicable

Hazard Indications (H) Regulation (EC) No 1272/2008 quoted in Sections 3.

Not classified

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