BLUE CARDINAL
• CHEMICAL •

SAFETY DATA SHEET

Issue Date 07/28/2014 **Revision Date** 06/22/2020 **Version** 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Lucin

Other means of identification

Product Code 5100

Recommended use of the chemical and restrictions on use

Recommended use Lubricant

Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC
3670 Scarlet Oak Blvd.
St. Louis, MO 63122
800-325-3312

Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Dissolved Gas	
Skin Irritant	Category 2
Eye Irritant	Category 2A
Specific Target Organ Toxicity (Single Exposure)	Category 3
Carcinogenicity	Category 1B
Germ Cell Mutagenicity	Category 2
Skin Sensitization	Category 1
Aspiration Hazard	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Contains gas under pressure; May explode if heated. Causes skin and serious eye irritation. May cause drowsiness or dizziness. May cause cancer. Suspected of causing genetic defects. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.

Appearance: Clear, Colorless to Slight Tint Spray **Physical state:** Dissolved Gas **Odor:** Chlorinated solvent odor

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, and eye/face protection. Avoid breathing dust/fume/gas/mist/vapor/spray. Contaminated work clothing must not be allowed out of the workplace. Wash contaminated clothing before reuse. Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Wash hands thoroughly after handling. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, state, and federal law.

Hazards not otherwise classified (HNOC)

Other Information

• N/A

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
Tetrachloroethylene	127-18-4	30-60%	*
Petroleum Distillates, Hydrotreated, Light	64742-47-8	10-20%	*
Trichloroethylene	79-01-6	5-15%	*
White Mineral Oil	8042-47-5	5-10%	*
Carbon Dioxide	124-38-9	1-5%	*

***The exact percentage (concentration) of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

First aid measures

Skin Contact Immediately wash with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Inhalation Move to fresh air. If not breathing administer artificial respiration, if breathing is difficult give oxygen.

Ingestion Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention.

Most important symptoms and effect, both acute and delayed

Symptoms ACUTE HEAL TH HAZARDS: Inhalation: dizziness, drowsiness, weakness, and fatigue. Eye: stinging, tearing, redness. Oral: Vomiting, discomfort, diarrhea. Skin: Prolonged or repeated contact may dry skin. CHRONIC HEAL TH HAZARDS: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

Indication of any immediate medical attention and special treatment needed

Note to physicians Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use appropriate media for surrounding fire.

Unsuitable extinguishing media: N/A

Unusual fire and explosion hazards
Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

Hazardous combustion products
Oxides of carbon, chlorine, hydrogen chloride and phosgene.

Special fire fighting procedures
Wear full protective clothing and NIOSH approved SCBA with full face piece operated in positive pressure or pressure demand. Use water mist to keep material cool in fire situations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Refer to section 8 for proper Personal Protective Equipment.

Methods and material for containment and cleaning up

Methods for containment & cleaning up Use absorbent on spill, sweep to clean. Dispose in accordance with local, state and federal laws. Small releases may be wiped up with wiping material. Dispose of in accordance with federal, state, and local regulations.

RCRA status Waste solvent likely considered F002 , hazardous halogenated solvents, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warning and precautions listed for the product. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use. Store locked up.

Incompatible Materials Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

CHEMICAL NAME	OSHA PEL	ACGIH TLV
Tetrachloroethvlene	100 ppm	25 ppm
Petroleum Distillates, Hydrotreated, Light	500 ppm	500 ppm
Trichloroethylene	10 ppm	25 ppm
White Mineral Oil	5 mg/m^3	10mg/m^3
Carbon Dioxide	5000 ppm	5000 ppm

Appropriate engineering controls

Engineering Controls Use only outdoors or in a well-ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses

Skin and body protection Gloves, and synthetic apron.

Respiratory protection Wear NIOSH/MSHA approved organic vapor respiratory protection if used in confined, poorly ventilated areas.

Additional Measures Wash hands thoroughly after handling. Do not breathe vapors. Do not eat, drink, or smoke while using product. Get medical attention if you feel unwell. If exposed or concerned: Get medical advice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Dissolved Gas
Appearance Clear, Colorless to Slight Tint Spray
Color Clear, Colorless
Odor Chlorinated solvent odor
Odor Threshold N/D

Property	Values
pH	N/A
Melting Point/Freezing Point	N/D
Initial Boiling Point And Boiling Range	N/D
Flash Point	N/D
Evaporation Rate	> 3 (Fast)
Flammability (Solid/Gas)	Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200)
Upper/Lower Flammability Or Explosive Limits	
Lower Flammability Limit	N/D
Upper Flammability Limit	N/D
Explosive Limit Lower(%)	N/D
Explosive Limit Upper(%)	N/D
Vapor Pressure (mm Hg)	N/D
Vapor Density (AIR=I)	N/D
Relative Density (H2O=1)	1.20-1.30
Solubility (IES)	0%
Partition Coefficient	N/D
Autoignition Temperature	N/D
Decomposition Temperature	N/D
Viscosity	N/D

10.STABILITY AND REACTIVITY

Reactivity
Chemically active metals and bases.

Chemical Stability
Stable

Possibility of Hazardous Reactions
None Known

Conditions to Avoid
Temperatures greater than 122°F may cause bursting.

Incompatible Materials
Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

Hazardous Decomposition Products
Oxides of carbon, chlorine, hydrogen chloride and phosgene.

11.TOXICOLOGICAL INFORMATION

Information on likely routes of exposure **Eyes, Ingestion, Inhalation, Skin**

Product Information

Skin Contact	Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.
Eye Contact	Causes severe irritation, redness, tearing, pain, visual disturbance, may cause eye damage.
Inhalation	Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.
Ingestion	Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, abdominal cramps.

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
Tetrachloroethylene (127-18-4)	(Oral, Rat) 2629 mg/kg		(Inhalation, Mouse, 8hr) 34200 mg/m3
Trichloroethylene (79-01-6)	(Oral, Rat) 4920 mg/kg	(Dermal, Rabbit)> 20000 mg/kg;	(Inhalation, Mouse, 4hr) 8450 ppm

Information on toxicological effects

Symptoms

MEDICAL CONDITION AGGRAVATED: Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system.

ACUTE HEALTH HAZARDS: Inhalation: dizziness, drowsiness, weakness, and fatigue. Eye: stinging, tearing, redness. Oral: Vomiting, discomfort, diarrhea. Skin: Prolonged or repeated contact may dry skin.

CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity **OSHA**: Yes **ACGIH**: A2 - Suspected **NTP**: 2 -Anticipated **IARC**: 2A - Probable **OTHER**: CA Prop 65

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 -Not classifiable as a human carcinogen
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity
Trichloroethylene (79-01-6) LC50 (96hr) Fish: 41 - 67 mg/L.

Soil Mobility
This product is mobile in soil.

Persistence and Degradability
Component or components of this product are not biodegradable.

Bioaccumulation
Components in this mixture can bioaccumulate in aquatic organisms.

Other Adverse Effects
This material is toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Dispose of in accordance with federal, state, and local regulations.
RCRA status	Waste solvent likely considered F002 , hazardous halogenated solvents, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Ltd. Qty.
Hazard Class	2.2 (6.1)
Packing Group	N/A

SHIPPING BY WATER: VESSEL (IMO/IMDG)

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Toxic
Hazard Class	2.2
Environmental Hazards Water	N/A
Packing Group	N/A

AIR SHIPMENT

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Non-Flammable, Containing Substances in Division 6.1, Packaging Group III
Hazard Class	2.2 (6.1)
Packing Group	N/A

15. REGULATORY INFORMATION

International Inventories

TSCA	All Chemicals are listed or exempt.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

SARA 313
Tetrachloroethylene (127-18-4); Trichloroethylene (79-01-6)

SARA 311/312 Hazard Categories
Acute Health, Chronic Health

CERCLA
Trichloroethylene (79-01-6) Reportable Quantity= 100 lbs **Tetrachloroethylene (127-18-4)** Reportable Quantity= 100 lbs

US State Regulations

Prop 65: This product can expose you to chemicals including Trichloroethylene which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information go to www.P65Wamings.ca.gov.

International Regulations
Trichloroethylene, CAS 79-01-6, - EC - yes, Japan - yes, Australia -yes, Korea - yes, Canada DSL-yes, Canada NDSL-no, Philipenes -yes. **Tetrachloroethylene** (127-18-4) WHMIS (Canada) Class D-IB: Material causing immediate and serious toxic effects (TOXIC). Class D-2A: Material causing other toxic effects (VERY TOXIC).

Volatile Organic Compounds (VOC)
0%

16. OTHER INFORMATION

NFPA	**Health hazards**	2	**Flammability**	2	**Reactivity**	0	**Other**	None
HMIS	**Health hazards**	1	**Flammability**	1	**Reactivity**	1	**Personal protection**	C

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Revision Note

N/A = Not Applicable; N/D = Not Determined

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet