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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: CorrLubeTM VpCI® Super Penetrant
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Corrosion inhibitors
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Cortec Corporation 4119 White Bear Parkway St. Paul, MN 55110 USA Phone (651) 429-1100 Fax (651) 429-1122

- · Information department: regulatory@cortecvci.com
- \cdot 1.4 Emergency telephone number:

Spill, Leak, Fire, Exposure, or Accident

24 hour CHEMTREC contact:

USA and Canada 1-800-424-9300

International +1-703-527-3887 (collect calls accepted)

UK +(44)-870-8200418

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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Safety data sheet according to 1907/2006/EC, Article 31

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· Hazard pictograms







GHS02

02 GHS05 GHS0

· Signal word Danger

· Hazard-determining components of labelling:

Distillates (petroleum), hydrotreated light calcium dihydroxide

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H315 Causes skin irritation.H318 Causes serious eye damage.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• **Description:** Mixture of the substances listed below with nonhazardous additions.

· Ingredients:		
CAS: 64742-47-8	Distillates (petroleum), hydrotreated light	25-50%
EINECS: 265-149-8	♦ Asp. Tox. 1, H304	
CAS: 74-98-6	propane liquefied	10-25%
EINECS: 200-827-9	♦ Flam. Gas 1, H220; ♦ Press. Gas C, H280	
CAS: 75-28-5	isobutane	10-25%
EINECS: 200-857-2	♦ Flam. Gas 1, H220; ♦ Press. Gas C, H280	
CAS: 1305-62-0	calcium dihydroxide	2.5-10%
EINECS: 215-137-3	♦ Skin Corr. 1B, H314; Eye Dam. 1, H318	

Additional information

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation In case of unconsciousness place patient stably on side position for transportation.
- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

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· After swallowing

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Do not induce vomiting. Immediately call a poison center or a doctor/physician.

· 4.2 Most important symptoms and effects, both acute and delayed

The symptoms and effects are as expected from the hazards shown in section 2. No specific product related symptoms are known.

- Information for doctor Show this safety data sheet to the doctor in attendance.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents



CO2, sand, extinguishing powder. Do not use water.

· For safety reasons unsuitable extinguishing agents

Water.

Water with full jet.

· 5.2 Special hazards arising from the substance or mixture

In certain fire conditions, traces of other toxic gases cannot be excluded.

- · 5.3 Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures





Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- \cdot 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

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· Information about protection against explosions and fires:

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Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Use explosion-proof apparatus / fittings and spark-proof tools.

- · 7.2 Conditions for safe storage, including any incompatibilities
- ·Storage
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurised containers.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

· Further information about storage conditions:

Keep receptacle tightly sealed.

Do not gas tight seal receptacle.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Use suitable respiratory protective device when high concentrations are present.



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). To determine the appropriate type of respiratory protection that should be used, and hazard assessment should be performed prior to using the product. Environmental conditions such as ventilation and other contaminants may affect the type of respiratory protection that is chosen.

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· Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Protective Gloves I.E., Nitrile, Viton, Neoprene
- Eye protection: Tightly sealed goggles.
- · **Body protection:** Protective work clothing.

9.1 Information on basic physical a	nd chemical properties	
General Information Appearance:		
Form:	Aerosol	
Colour:	Amber coloured	
Odour:	Characteristic	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	-44 °C (*)	
Flash point:	-97 °C (*)	
Flammability (solid, gaseous)	Not applicable.	
Ignition temperature:	210 °C (*)	
Decomposition temperature:	Not determined.	
Self igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	0.5 Vol % (*)	
Upper:	10.9 Vol % (*)	
Vapour pressure at 20 °C:	8300 hPa (*)	
Density:	Not determined	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	

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• **9.2 Other information**The above data are typical values and do not constitute a specification.

*Properties have been calculated.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability Stable under recommended storage conditions
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known

*

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

 LD/LC50 values that are relevant for classification

64742-47-8 Distillates (petroleum), hydrotreated light

Oral LD50 >5000 mg/kg (Rat)
Dermal LD50 >2000 mg/kg (Rabbit)

1305-62-0 calcium dihydroxide

Oral LD50 7340 mg/kg (Rat)

· Components Type Value Species

64742-47-8 Distillates (petroleum), hydrotreated light

EL50 1.4 mg/l (Daphnia magna) (2 days)

1 mg/l (Green algae) (72 Hours)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

· Serious eve damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

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SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

64742-47-8 Distillates (petroleum), hydrotreated light

Oral LL50 25 mg/l (Oncorhynchus mykiss (rainbow trout)) (96 hours)
LC50 2.9 mg/l (Oncorhynchus mykiss (rainbow trout)) (96 hours)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Dispose of in accordance with local, state, and federal regulations.

· European waste catalogue

The European Waste Catalogue (EWC) waste codes do not refer to product but to origin. The manufacturer is therefore unable to quote a waste code for products which are used in various industries. Any codes shown should be regarded as a recommendation to the user.

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 07 00	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 99	wastes not otherwise specified
HP 3	Flammable

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name	
· ADR	1950 AEROSOLS
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable

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14.3 Transport hazard class(es) ADR	
· Class · Label	2 5F Gases.2.1
· IMDG, IATA	
· Class · Label	2.1 2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Code	Warning: Gases. F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre Category A. For AEROSOLS with a capacity above 1 litre
· Segregation Code	Category B. For WASTE AEROSOLS: Category C, Clear living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litr Segregation as for class 9. Stow "separated from" class except for division 1.4. For AEROSOLS with a capaci above 1 litre: Segregation as for the appropriate subdivision class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Anne Marpol and the IBC Code	x II of Not applicable.
· Transport/Additional information:	DOT EXCEPTION: See Code 49 section 172.101, colum (8A). Section 173.306(h) permits "limited quantity" materia (inner packagings which do not exceed 1L capacity / 61 cub inches and for which internal pressures do not exceed 18 psig at 130 degrees F.) meeting section 171.8 definition ("consumer commodity" to be renamed "Consumer commodity reclassed as ORM-D when shipped via ground mode domestically.
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
· Transport category	2

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· Tunnel restriction code	D
· Remarks:	DOT EXCEPTION: See Code 49 section 172.101, column (8A). Section 173.306(h) permits "limited quantity" material (inner packagings which do not exceed 1L capacity / 61 cubic inches and for which internal pressures do not exceed 180 psig at 130 degrees F.) meeting section 171.8 definition o "consumer commodity" to be renamed "Consumer commodity reclassed as ORM-D when shipped via ground mode domestically.
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- \cdot Qualifying quantity (tonnes) for the application of upper-tier requirements $500\ t$
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	12.5

- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Cortec Corporation does not warranty any translation of this SDS not created by Cortec Corporation.

· Relevant phrases

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern Flam. Gas 1: Flammable gases – Category 1

Aerosol 1: Aerosols – Category 1

Press. Gas C: Gases under pressure – Compressed gas Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.

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