Reviewed on 05/01/2017 Printing date 05/01/2017

1 Identification

· Product identifier

- · Trade name: DRISLIDE MULTI-PURPOSE DRY LUBRICANT- Aerosol Can
- · Application of the substance / the mixture Lubricant
- · 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

Drislide N. America, Inc. 1452 Delashmut Avenue Columbus, OH 43212

Phone: (614) 291-6900 or (800) 231-6901

- · Information department: (614) 291-6900 or (800) 231-6901
- · Emergency telephone number: 800-231-6901

2 Hazard(s) identification

· Classification of the substance or mixture





GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS08 Health hazard

H372 Causes damage to the central nervous system through prolonged or repeated exposure. STOT RE 1

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

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS02

GHS04

- · Signal word Danger
- · Hazard-determining components of labeling:

Solvent naphtha (petroleum), medium aliph.

· Hazard statements

Extremely flammable aerosol.

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(Contd. of page 1)

Contains gas under pressure; may explode if heated.

Causes damage to the central nervous system through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Get medical advice/attention if you feel unwell.

Do NOT induce vomiting.

Store locked up.

Protect from sunlight. Store in a well-ventilated place.

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

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

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 64742-88-7	Solvent naphtha (petroleum), medium aliph.	25-50%	
EINECS: 265-191-7	♦ STOT RE 1, H372; Asp. Tox. 1, H304; Flam. Liq. 4, H227		
CAS: 75-28-5	isobutane	10-25%	
EINECS: 200-857-2	♦ Flam. Gas 1, H220; ♦ Press. Gas, H280		
CAS: 74-98-6	propane liquefied	10-25%	
EINECS: 200-827-9	♦ Flam. Gas 1, H220; ♦ Press. Gas, H280		

· Additional information

Molybdenum Disulfide is present at 2.5-10%

In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR 1910.1200), the specific chemical identity and/or exact percentage composition has been withheld as a trade secret.

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

4 First-aid measures

- · Description of first aid measures
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

If skin irritation continues, consult a doctor.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing

For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Danger of aspiration.

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

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(Contd. of page 2)

- **Information for doctor** Show this safety data sheet to the doctor in attendance.
- 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.

· Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents



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

· For safety reasons unsuitable extinguishing agents

Water.

Water with full jet.

· Special hazards arising from the substance or mixture

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

- · Advice for firefighters Self-contained breathing apparatus
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures





Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

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

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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.

7 Handling and storage

- · Handling
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

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(Contd. of page 3)

· Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized 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.

- · 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 pressurized containers.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing 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.

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

8 Exposure controls/personal protection

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

	75-28-5 isobutane (10-25%)		
	Short-term value: (2370) mg/m³, (1000) ppm NIC-EX		
74-98	74-98-6 propane liquefied (10-25%)		
PEL	Long-term value: 1800 mg/m³, 1000 ppm		
REL	Long-term value: 1800 mg/m³, 1000 ppm		
TLV	refer to Appendix F inTLVs&BEIs book; NIC-EX		
Distil	Distillates (petroleum), hydrotreated heavy naphthenic (2.5-10%)		
OEL	Short-term value: 5 mg/m³, 5 ppm		

- · Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls Use local exhaust ventilation to control airborne concentrations below exposure limits.
- · 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.

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(Contd. of page 4)

- · Breathing equipment: Not required.
- · 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

- · Protective Gloves I.E., Nitrile, Viton, Neoprene
- · 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.

- Eye protection: Tightly sealed goggles.
- · Body protection: Protective work clothing.

Information on basic physical and	chemical properties	
General Information		
Appearance: Form:	Aerosol	
Color:	Black	
Odor:	Solvent-like	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	-44 °C (-47 °F) (*)	
Flash point:	Not applicable, as aerosol	
Flammability (solid, gaseous)	Not applicable.	
Ignition temperature:	265 °C (509 °F) (*)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:	0.677.104.40	
Lower:	0.6 Vol % (*)	
Upper:	10.9 Vol % (*)	
Vapor pressure at 20 °C (68 °F):	8300 hPa (6226 mm Hg) (*)	
Density at 20 °C (68 °F):	0.72-0.96 g/cm³ (6.008-8.011 lbs/gal)	
Relative density	Not determined.	
Vapor 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:		
`	Not determined.	

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Trade name: DRISLIDE MULTI-PURPOSE DRY LUBRICANT- Aerosol Can

(Contd. of page 5)

kinematic: Not determined.

• Other information VOC: 0.66 g/cm3 (5.53 lbs/gal)

The above data are typical values and do not constitute a specification.

*Properties have been calculated.

10 Stability and reactivity

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

oxidizing agents

potassium nitrate

hydrogen peroxide

· Hazardous decomposition products:

Carbon monoxide

Carbon dioxide

Sulfur dioxide

molybdenum trioxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

64742-88-7 Solvent naphtha (petroleum), medium aliph.

Oral	LD50	>6500 mg/kg (Rat)
Dermal	LD50	>3000 mg/kg (Rabbit)
Inhalative	LC50/4 h	>14 mg/l (Rat)

- Primary irritant effect:
- on the skin: Repeated or prolonged skin contact with this product may produce skin irritation.
- · on the eye: May be irritating.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

IARC Category 3: Not classifiable as to its carcinogenicity to humans

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

USΔ

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(Contd. of page 6)

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of in accordance with local, state, and federal regulations.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

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· DOT, ADR, IMDG, IATA UN1950

· UN proper shipping name

· DOT Aerosols, flammable
· ADR 1950 Aerosols
· IMDG AEROSOLS

· IATA AEROSOLS, flammable

- · Transport hazard class(es)
- \cdot DOT



• Class 2.1 • Label 2.1

· ADR



· Class 2 5F Gases

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Trade name: DRISLIDE MULTI-PURPOSE DRY LUBRICANT- Aerosol Can

	(Contd. of page
· Label	2.1
· IMDG, IATA	
· Class · Label	2.1 2.1
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Code · Segregation Code	Warning: Gases F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litr Category A. For AEROSOLS with a capacity above 1 litr Category B. For WASTE AEROSOLS: Category C, Clear of livin quarters. SG69 For AEROSOLS with a maximum capacity of 1 litr Segregation as for class 9. Stow "separated from" class 1 except f division 1.4. For AEROSOLS with a capacity above 1 litr Segregation as for the appropriate subdivision of class 2. F WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

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(Contd. of page 8)

· TSCA (Toxic Substances Control Act) (Substances not listed)

All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Canadian Domestic Substances List (DSL) (Substances not listed)

All ingredients are listed.

· Philippines Inventory of Chemicals and Chemical Substances (Substances not listed)

All ingredients are listed.

· Chinese Chemical Inventory of Existing Chemical Substances (Substances not listed)

All ingredients are listed.

· Australian Inventory of Chemical Substances (Substances not listed)

All ingredients are listed.

· New Zealand Inventory of Chemicals (Substances not listed)

All ingredients are listed.

· Existing Chemical Substances (Substances not listed)

Solvent naphtha (petroleum), medium aliph.

Graphite 1-481

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS02

02 GHS04

GHS0

· Signal word Danger

· Hazard-determining components of labeling:

Solvent naphtha (petroleum), medium aliph.

· Hazard statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes damage to the central nervous system through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Get medical advice/attention if you feel unwell.

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Trade name: DRISLIDE MULTI-PURPOSE DRY LUBRICANT- Aerosol Can

(Contd. of page 9)

Do NOT induce vomiting.

Store locked up.

Protect from sunlight. Store in a well-ventilated place.

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

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

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	64.0

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

- · Date of preparation / last revision 05/01/2017 / -
- · Abbreviations and acronyms:

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

DOT: US Department of Transportation

IATA: International Air Transport Association

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Gas 1: Flammable gases - Category 1

Flam. Aerosol 1: Aerosols – Category 1

Press. Gas: Gases under pressure - Compressed gas

Flam. Liq. 4: Flammable liquids – Category 4

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.

USA