SAFETY DATA SHEET

Valvoline™ COBALT #2 Grease

Version: 2.1 | Revision Date: 02/02/2021 | Print Date: 04/20/2021

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ COBALT #2 Grease

Product code : 872117

Details of the supplier of the safety data sheet	**Emergency telephone number**
Valvoline LLC 100 Valvoline Way Lexington, KY 40509 United States of America (USA) 1-800-TEAMVAL (1-800-832-6825) SDS@valvoline.com	1-800-VALVOLINE (1-800-825-8654) **Regulatory Information Number** 1-800-TEAMVAL (1-800-832-6825) **Product Information** 1-800-TEAMVAL (1-800-832-6825)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Eye irritation : Category 2A

Skin sensitization : Category 1

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary Statements : **Prevention:**
Wear protective gloves/ eye protection/ face protection.
Contaminated work clothing must not be allowed out of the workplace.
Wash skin thoroughly after handling.
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Response:
Wash contaminated clothing before reuse.
If eye irritation persists: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
NONANEDIOIC ACID, DILITHIUM SALT	38900-29-7	Acute Tox. 4; H302	>=15.00 - < 20.00
Pentene, 2,4,4-trimethyl-, sulfurized	68515-88-8	Skin Irrit. 2; H315 Skin Sens. 1A; H317	>=1.50 - < 5.00
2,5-BIS(OCTYLDITHIO)-1,3,4-THIADIAZOLE	13539-13-4	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317	>=0.10 - < 0.50
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	Skin Sens. 1; H317	>=0.10 - < 0.50

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	:	No hazards which require special first aid measures.
If inhaled	:	If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye.
If swallowed	:	Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	No symptoms known or expected. Causes serious eye irritation. May cause an allergic skin reaction.
Notes to physician	:	No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO2) Dry chemical
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	No hazardous combustion products are known
Specific extinguishing methods	:	Product is compatible with standard fire-fighting agents.
Further information	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid dust formation. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
Other information	:	Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8.
Materials to avoid	:	No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Engineering measures	:	General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection	:	Respiratory protection is not required under normal conditions of use. No personal respiratory protective equipment normally required.
Eye protection	:	Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed

		into eyes.
Skin and body protection	:	Wear resistant gloves (consult your safety equipment supplier). Wear as appropriate: Safety shoes
Hygiene measures	:	General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Solid form
Colour	:	blue
Odour	:	No data available
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	> 700 °F / > 371 °C
Flash point	:	> 399 °F / > 204 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not expected to form explosive dust-air mixtures.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	< 1 hPa (68 °F / 20 °C)
Relative vapour density	:	No data available
Relative density	:	No data available

Density	:	0.941 g/cm3 (68 °F / 20 °C)
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	> 1000 mm2/s (104 °F / 40 °C)
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Product will not undergo hazardous polymerization.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products		No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation
Skin contact
Eye Contact
Ingestion
Acute toxicity
Not classified based on available information.
Product:

Acute oral toxicity	:	Acute toxicity estimate: 2,500 mg/kg Method: Calculation method

Components:

NONANEDIOIC ACID, DILITHIUM SALT:

Acute oral toxicity : LD50 (Rat, female): > 300 - < 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.
Remarks: Information given is based on data obtained from similar substances.

2,5-BIS(OCTYLDITHIO)-1,3,4-THIADIAZOLE:

Acute inhalation toxicity : Assessment: The component/mixture is classified as acute inhalation toxicity, category 4.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by ingestion under GHS.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Skin corrosion/irritation

Not classified based on available information.

Components:

NONANEDIOIC ACID, DILITHIUM SALT:

Method : Regulation (EC) No. 440/2008, Annex, B.40
Result : No skin irritation

Pentene, 2,4,4-trimethyl-, sulfurized:

Result : Severe skin irritation

2,5-BIS(OCTYLDITHIO)-1,3,4-THIADIAZOLE:

Result : Irritating to skin.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Assessment : Irritating to eyes.

Components:
NONANEDIOIC ACID, DILITHIUM SALT:
Species : Rabbit
Result : Slight, transient irritation

2,5-BIS(OCTYLDITHIO)-1,3,4-THIADIAZOLE:
Result : Irritating to eyes.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione:
Species : Rabbit
Result : Slight, transient irritation

Respiratory or skin sensitisation
Skin sensitisation
May cause an allergic skin reaction.
Respiratory sensitisation
Not classified based on available information.
Components:
NONANEDIOIC ACID, DILITHIUM SALT:
Test Type : Local lymph node assay
Assessment : Does not cause skin sensitisation.
Method : OECD Test Guideline 429

Pentene, 2,4,4-trimethyl-, sulfurized:
Test Type : Open epicutaneous test
Species : Guinea pig
Assessment : The product is a skin sensitiser, sub-category 1A.
Method : OECD Test Guideline 406

2,5-BIS(OCTYLDITHIO)-1,3,4-THIADIAZOLE:
Assessment : May cause sensitisation by skin contact.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione:
Test Type : Local lymph node assay
Assessment : May cause sensitisation by skin contact.
Method : OECD Test Guideline 429

Germ cell mutagenicity
Not classified based on available information.
Components:
NONANEDIOIC ACID, DILITHIUM SALT:
Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione:
Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

Carcinogenicity
Not classified based on available information.

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Not classified based on available information.
STOT - single exposure
Not classified based on available information.
STOT - repeated exposure
Not classified based on available information.
Aspiration toxicity
Not classified based on available information.

Further information
Product:
Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:
Ecotoxicology Assessment
Short-term (acute) aquatic hazard : Acute aquatic toxicity Category 2; Toxic to aquatic life.

Long-term (chronic) aquatic hazard : Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.

Components:
NONANEDIOIC ACID, DILITHIUM SALT**:**
Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 100 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 23 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test

Pentene, 2,4,4-trimethyl-, sulfurized**:**

Toxicity to fish	:	LC50 (Fish): 0.494 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50 (Aquatic invertebrates): 0.004 mg/l Exposure time: 96 h Test Type: static test

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	:	Acute aquatic toxicity Category 1; Very toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione**:**

Toxicity to fish	:	EC50 (Pimephales promelas (fathead minnow)): > 454 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 20 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test

Persistence and degradability

Components:

NONANEDIOIC ACID, DILITHIUM SALT**:**

Biodegradability	:	Result: Readily biodegradable. Remarks: Information given is based on data obtained from similar substances.

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione**:**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 0 % Exposure time: 28 d Method: OECD Test Guideline 301B

No data available

Bioaccumulative potential

Components:

NONANEDIOIC ACID, DILITHIUM SALT**:**

Partition coefficient: n-octanol/water	:	log Pow: -3.5

No data available
Mobility in soil
Components:
No data available
Other adverse effects
No data available
Product:
Additional ecological information : No data available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

CFR_ROAD
Not regulated as a dangerous good

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Serious eye damage or eye irritation Respiratory or skin sensitisation
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

The components of this product are reported in the following inventories:

DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to TSCA 12(b) export notification requirements.

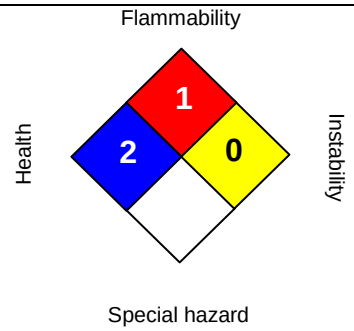
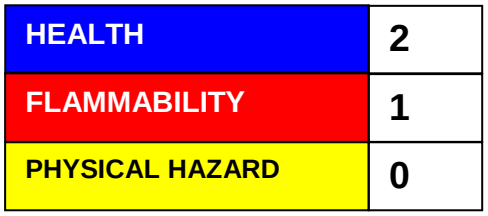
Inventories

AICS (Australia), AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Internal information : 000000263938

NFPA:	HMIS III:
	

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification
Combustible Liquid Class IIIB

Full text of H-Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Sources of key data used to compile the Safety Data Sheet
Valvoline internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-VALVOLINE).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :
ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment
STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System