

Heavy Duty Cerulean™ High Temperature Multi-Purpose Grease #2

Version: 2.0 Revision Date: 06/19/2023 Print Date: 06/21/2023

#### **SECTION 1. IDENTIFICATION**

Product name : Heavy Duty Cerulean™ High Temperature Multi-Purpose

Grease #2

Product code : VV70133

Manufacturer or supplier's details

Company name of supplier : Valvoline Global Operations

Address : 100 Valvoline Way

Lexington, KY 40509

United States of America (USA)

Telephone : 1-800-TEAMVAL (1-800-832-6825)

E-mail address : SDS@valvolineglobal.com

Emergency telephone

number

: +1-800-VALVOLINE (+1-800-825-8654)

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitisation : Category 1

**GHS** label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.



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Precautionary statements : Prevention:

P261 Avoid breathing mist or vapours.

P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards

None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
NONANEDIOIC ACID, DILITHIUM	38900-29-7	>= 10 - < 15
SALT		
2,5-BIS(OCTYLDITHIO)-1,3,4-	13539-13-4	>= 0.1 - < 0.5
THIADIAZOLE		
Pentene, 2,4,4-trimethyl-, sulfurized	68515-88-8	>= 0.1 - < 0.5

Actual concentration is withheld as a trade secret

### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.



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Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Induce vomiting immediately and call a physician.

Keep respiratory tract clear.

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

May cause an allergic skin reaction. No symptoms known or expected.

Notes to physician : Treat symptomatically.

No hazards which require special first aid measures.

### **SECTION 5. FIREFIGHTING MEASURES**

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

carbon dioxide and carbon monoxide

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Use personal protective equipment.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.



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If the product contaminates rivers and lakes or drains inform

respective authorities.

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.

### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on

storage stability

No decomposition if stored and applied as directed.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## Personal protective equipment

Respiratory protection : Respiratory protection is not required under normal

conditions of use.

No personal respiratory protective equipment normally



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required.

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection : Impervious clothing

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

Colour : blue green

Odour : hydrocarbon-like

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range :  $> 700 \, ^{\circ}\text{F} / > 371 \, ^{\circ}\text{C}$ 

Flash point :  $> 399 \, ^{\circ}\text{F} / > 204 \, ^{\circ}\text{C}$ 

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Self-ignition : No data available

Upper explosion limit / Upper : No data available



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flammability limit

Lower explosion limit / Lower : No data available

flammability limit

Vapour pressure : < 0.1 hPa (68 °F / 20 °C)

Relative vapour density

No data available

Relative density

No data available

0.9 g/cm3 (68 °F / 20 °C) Density

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)

No data available Oxidizing properties

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity No decomposition if stored and applied as directed.

Chemical stability No decomposition if stored and applied as directed.

Possibility of hazardous

reactions

No decomposition if stored and applied as directed.

Conditions to avoid None known.

Incompatible materials None known.

Hazardous decomposition No hazardous decomposition products are known.



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products

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 3,333 mg/kg

Method: Calculation method

### **Components:**

# NONANEDIOIC ACID, DILITHIUM SALT:

Acute oral toxicity : LD50 (Rat, female): > 300 - < 2,000 mg/kg

Remarks: The toxicological data has been taken from

products of similar composition.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: The toxicological data has been taken from

products of similar composition.

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

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.

#### Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation and/or dermatitis.

### **Components:**

## NONANEDIOIC ACID, DILITHIUM SALT:

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

Result : No skin irritation

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

Result : Irritating to skin.

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



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Result : Severe skin irritation

### Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

#### **Components:**

### **NONANEDIOIC ACID, DILITHIUM SALT:**

Species : Rabbit

Result : Slight, transient irritation

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

Result : Irritating to eyes.

#### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

### Respiratory sensitisation

Not classified based on available information.

## Product:

Remarks : May cause allergic skin reaction.

Remarks : Causes sensitisation.

### Components:

## NONANEDIOIC ACID, DILITHIUM SALT:

Test Type : Local lymph node assay

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 429

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

Assessment : May cause sensitisation by skin contact.

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

Test Type : Open epicutaneous test

Species : Guinea pig

Assessment : The product is a skin sensitiser, sub-category 1A.



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Method : OECD Test Guideline 406

### 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

## 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



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#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

## **Product:**

### **Ecotoxicology Assessment**

Acute aquatic toxicity Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity Category 3; Harmful to aquatic life Chronic aquatic toxicity

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

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 23 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test

## **Ecotoxicology Assessment**

Acute aquatic toxicity Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity Not classified based on available information.

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

### **Ecotoxicology Assessment**

Acute aquatic toxicity Not classified based on available information.

Not classified based on available information. Chronic aquatic toxicity

### 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 : EC50 (Aquatic invertebrates): 0.004 mg/l



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aquatic invertebrates Exposure time: 96 h (Chronic toxicity) Test Type: static test

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 1; Very toxic to aquatic life

with long lasting effects.

Persistence and degradability

**Components:** 

NONANEDIOIC ACID, DILITHIUM SALT:

Biodegradability : Result: Readily biodegradable.

Remarks: The toxicological data has been taken from

products of similar composition.

Bioaccumulative potential

**Components:** 

NONANEDIOIC ACID, DILITHIUM SALT:

Partition coefficient: n-

octanol/water

: log Pow: -3.5

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

Additional ecological

information

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.



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#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

### **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**

### 49 CFR

Not regulated as a dangerous good

### Special precautions for user

Not applicable

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**

### **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.



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### 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 : 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.

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### **US State Regulations**

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know

PROPRIETARY OF CERULEAN GREASES #0, #1, #2 Not Assigned NONANEDIOIC ACID, DILITHIUM SALT 38900-29-7

#### **Maine Chemicals of High Concern**

Product does not contain any listed chemicals

### **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

### **Washington Chemicals of High Concern**

Product does not contain any listed chemicals

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

TCSI : Not in compliance with the inventory

TSCA : On the inventory, or in compliance with the inventory



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AIIC : Not in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

## **TSCA list**

No substances are subject to a Significant New Use Rule.

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

## **Inventories**

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

## **SECTION 16. OTHER INFORMATION**

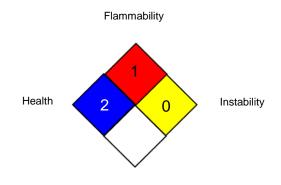
#### **Further information**



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#### NFPA 704:



Special hazard

#### HMIS® IV:

HEALTH	1	2
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation: DOT - Department of Transportation: DSL -Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD -Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure



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Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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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.

US / EN

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