



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

**SECTION 1. IDENTIFICATION** 

Product name: ROYCO 22MS MIL-G-81827

HIGH LOAD AIRCRAFT GREASE

Product Use Description: Lubricant

Synonyms: Synthetic Lubricant Formulation

Company: <u>Manufacturer</u>

Anderol Specialty Lubricants, a division of Lanxess Solutions US Inc.

215 Merry Lane East Hanover, NJ

07936

United States of America (USA)

Telephone: +1 203-573-4596, Toll Free: +1 888-263-3765

Emergency telephone

number:

CHEMTREC

(24 hours) 800-424-9300

For additional emergency telephone numbers see section 16 of the Safety

Data Sheet.

Prepared by Product Safety Department

(US) +1 866-430-2775

MSDSRequest@lanxess.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

Restrictions on use : Reserved for industrial and professional use.

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

GHS classification in accordance with 29 CFR 1910.1200

Skin sensitisation : Category 1

Carcinogenicity : Category 1B

Specific target organ toxicity

- repeated exposure

Category 2

Short-term (acute) aquatic

hazard

Category 2

Long-term (chronic) aquatic

hazard

Category 3

# **GHS** label elements





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

Hazard pictograms





Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.

H350 May cause cancer.

H373 May cause damage to organs through prolonged or re-

peated exposure.

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

#### Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P272 Contaminated work clothing must not be allowed out of

the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

#### Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P308 + P313 IF exposed or concerned: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

# Storage:

P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

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

Substance / Mixture : Mixture

### **Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
molybdenum disulphide	1317-33-5	>= 5 - < 10
Graphite	7782-42-5	>= 1 - < 5
sodium nitrite	7632-00-0	>= 1 - < 5
Benzenamine, N-phenyl-, reaction products	68411-46-1	>= 1 - < 5





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

with 2,4,4-trimethylpentene		
pentaerythritol	115-77-5	>= 1 - < 5
N-1-naphthylaniline	90-30-2	>= 1 - < 2.5
(Z)-N-methyl-N-(1-oxo-9-	110-25-8	>= 0.1 - < 0.25
octadecenyl)glycine		

Actual concentration is withheld as a trade secret.

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

If inhaled : Remove to fresh air.

Aspiration may cause pulmonary oedema and pneumonitis.

If breathing is difficult, give oxygen. If symptoms persist, call a physician.

In case of skin contact : Wash off with warm water and soap.

If skin irritation persists, call a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Obtain medical attention.

If swallowed : Obtain medical attention.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

None known.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

Notes to physician : For specialist advice physicians should contact the Poisons

Information Service.

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

Suitable extinguishing media : (on small fires)

Carbon dioxide (CO2)

Dry chemical Dry sand

Extinguishing media - large fires

Foam Water mist

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire- : Do not use a solid water stream as it may scatter and spread





Version **Revision Date:** SDS Number: Date of last issue: 09/12/2019 06/26/2020 40000001766 Date of first issue: 12/05/2014 1.8

fighting fire.

Burning produces irritant fumes.

Exposure to decomposition products may be a hazard to

health.

Further information Cool containers/tanks with water spray.

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES** 

Personal precautions, protec- : Wear suitable protective equipment.

tive equipment and emer-

gency procedures

Should not be released into the environment. **Environmental precautions** 

Do not flush into surface water or sanitary sewer system.

Methods and materials for

containment and cleaning up

Scrape up.

Pick up and transfer to properly labelled containers.

**SECTION 7. HANDLING AND STORAGE** 

Handle in accordance with good industrial hygiene and safety Advice on safe handling

practice.

Avoid contact with skin, eyes and clothing. Wear suitable protective equipment.

Keep tightly closed.

Protect from contamination.

Conditions for safe storage Keep tightly closed in a dry, cool and well-ventilated place.

Protect from contamination.

Further information on stor-

age stability

Stable under recommended storage conditions.

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

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
pentaerythritol	115-77-5	TWA	10 mg/m3	ACGIH
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Res- pirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

	1		1	1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respir-	5 mg/m3	OSHA P0
		able dust		
		fraction)		
molybdenum disulphide	1317-33-5	TWA (total	15 mg/m3	OSHA Z-1
		dust)	(Molybdenum)	400111
		TWA (Inhal-	10 mg/m3	ACGIH
		able particu- late matter)	(Molybdenum)	
		TWA (Res-	3 mg/m3	ACGIH
		pirable par-	(Molybdenum)	Accini
		ticulate mat-	(Worybaoriairi)	
		ter)		
		TWA (Total	10 mg/m3	OSHA P0
		dust)	(Molybdenum)	
Graphite	7782-42-5	TWA (total	15 mg/m3	OSHA Z-1
·		dust) `		
		TWA (respir-	5 mg/m3	OSHA Z-1
		able fraction)		
		TWA (Res-	2 mg/m3	ACGIH
		pirable par-		
		ticulate mat-		
		ter)		
		TWA (Res-	2.5 mg/m3	NIOSH REL
		pirable)	A F. NATIL'	00114.7.0
		TWA (Dust)	15 Million parti- cles per cubic foot	OSHA Z-3
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respir-	5 mg/m3	OSHA P0
		able dust	3 1119/1113	CONTATO
		fraction)		
		TWA (respir-	2.5 mg/m3	OSHA P0
		able dust		
		fraction)		
pentaerythritol	115-77-5	TWA	10 mg/m3	ACGIH
		TWA (total	15 mg/m3	OSHA Z-1
		dust)		
		TWA (respir-	5 mg/m3	OSHA Z-1
		able fraction)		
		TWA (Res-	5 mg/m3	NIOSH REL
		pirable)	10 1 5	NII 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (Total	10 mg/m3	OSHA P0
		dust)	F	OCUA DO
		TWA (respir-	5 mg/m3	OSHA P0
		able dust fraction)		
Ouartz (SiO2)	14808-60-7		250 mpnof /	OSHA Z-3
Quartz (SiO2)	14000-00-7	TWA (respir- able)	250 mppcf / %SiO2+5	USHA 2-3
		TWA (respir-	10 mg/m3 /	OSHA Z-3
		able)	%SiO2+2	001 IA 2-3
		TWA (Res-	0.05 mg/m3	NIOSH REL



# **ROYCO 22MS MIL-G-81827**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

I	1	1	1	1
		pirable dust)	0.4	00114 D0
		TWA (respir-	0.1 mg/m3	OSHA P0
		able dust		
		fraction)		
		TWA (Res-	0.025 mg/m3	ACGIH
		pirable par-	(Silica)	
		ticulate mat-		
		ter)		
		TWA (Res-	0.05 mg/m3	OSHA Z-1
	4047.00.5	pirable dust)	4.5 ma or/ma 2	00114.7.4
molybdenum disulphide	1317-33-5	TWA (total dust)	15 mg/m3 (Molybdenum)	OSHA Z-1
		TWA (Inhal-	10 mg/m3	ACGIH
		able particu-	(Molybdenum)	
		late matter)		
		TWA (Res-	3 mg/m3	ACGIH
		pirable par-	(Molybdenum)	
		ticulate mat-	\	
		ter)		
		TWA (Total	10 mg/m3	OSHA P0
		dust)	(Molybdenum)	33.77.10
Graphite	7782-42-5	TWA (total	15 mg/m3	OSHA Z-1
Ciapino	1102 42 0	dust)	.59/1110	55.17.2
		TWA (respir-	5 mg/m3	OSHA Z-1
		able fraction)	5 mg/mo	301772
		TWA (Res-	2 mg/m3	ACGIH
		pirable par-	2 111g/1113	ACGIT
		ticulate mat-		
		ter)	2.5 mg/m2	NIOCH DEI
		TWA (Res-	2.5 mg/m3	NIOSH REL
		pirable)	AE Millian and	00114.7.0
		TWA (Dust)	15 Million parti-	OSHA Z-3
			cles per cubic foot	00114 = 5
		TWA (Total	10 mg/m3	OSHA P0
		dust)		
		TWA (respir-	5 mg/m3	OSHA P0
		able dust		
		fraction)		
		TWA (respir-	2.5 mg/m3	OSHA P0
		able dust		
		fraction)		
pentaerythritol	115-77-5	TWA	10 mg/m3	ACGIH
		TWA (total	15 mg/m3	OSHA Z-1
		dust) `	=	
		TWÁ (respir-	5 mg/m3	OSHA Z-1
		able fraction)		
		TWA (Res-	5 mg/m3	NIOSH REL
		pirable)		
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (Total	10 mg/m3	OSHA P0
		dust)	. 59/1110	33.77.10
		TWA (respir-	5 mg/m3	OSHA P0
		able dust	J mg/mo	JOHATO
		fraction)		
		μασιίστι)		<u>l</u>





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

N-1-naphthylaniline 90-30-2 TWA 10 ml/m3 ACGIH

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Respirator with combination filter for vapour/particulate (EN

141)

Hand protection

Remarks : Polyvinyl alcohol or nitrile- butyl-rubber gloves

Before removing gloves clean them with soap and water. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Request information on glove permeation properties from the glove

supplier.

Eye protection : Safety glasses with side-shields

Skin and body protection : Impervious clothing

Protective measures : These recommendations apply to the product as supplied.

Please follow all applicable local/national requirements when

selecting protective measures for a specific workplace.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

Wash hands before breaks and at the end of workday.

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

Appearance : viscous liquid

Colour : black

Odour : mild, hydrocarbon-like

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point :  $> 446 \, ^{\circ}\text{F} / 230 \, ^{\circ}\text{C}$ 

Method: open cup

Evaporation rate : No data available

Self-ignition : No data available





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : Not applicable

Relative vapour density : No data available

Relative density : 0.8

Solubility(ies)

Water solubility : negligible

Solubility in other solvents : partly soluble

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : not determined

Decomposition temperature : No data available

Self-Accelerating decomposi-

tion temperature (SADT)

Method: No information available.

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing potential : No information available.

Molecular weight : No data available

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

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reac-

tions

Hazardous polymerisation does not occur.

Conditions to avoid : Contamination

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

Carbon oxides Oxides of calcium Sulphur oxides





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

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

## Information on likely routes of exposure

Inhalation Eye contact Skin contact Skin Absorption

**Acute toxicity** 

**Product:** 

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Remarks: Information given is based on data obtained from

similar substances.

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

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

pentaerythritol:

Acute oral toxicity : LD50 (Rat): 10,000 mg/kg

Acute inhalation toxicity : LC0 (Rat): > 11 mg/l

Exposure time: 6 h

Test atmosphere: dust/mist

Test substance: see user defined free text

Remarks: Information given is based on data obtained from

similar substances.

Acute dermal toxicity : LD50 (Rabbit): 10,000 mg/kg

N-1-naphthylaniline:

Acute oral toxicity : LD50 (Rat): 1,625 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Method : OECD-Guideline No. 404

Result : Mild skin irritation



# ROYCO 22MS MIL-G-81827

Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

pentaerythritol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : no

Remarks : Information given is based on data obtained from similar sub-

stances.

N-1-naphthylaniline:

Species : Rabbit
Method : Draize Test
Result : No skin irritation

Serious eye damage/eye irritation

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

pentaerythritol:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

GLP : no

Remarks : Information given is based on data obtained from similar sub-

stances.

N-1-naphthylaniline:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Respiratory or skin sensitisation

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

N-1-naphthylaniline:

Test Type : Maximisation Test Species : Guinea pig

Result : Probability or evidence of low to moderate skin sensitisation

rate in humans

Test Type : Patch Test





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

Species : Humans

Result : Probability or evidence of low to moderate skin sensitisation

rate in humans

Test Type : Maximisation Test

Species : Guinea pig

Result : Probability or evidence of low to moderate skin sensitisation

rate in humans

Germ cell mutagenicity

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Germ cell mutagenicity -

Assessment

: Not mutagenic in Ames Test

pentaerythritol:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

GLP: no

Remarks: Information given is based on data obtained from

similar substances.

Test Type: In Vitro mammalian Cell Gene Mutation Test Metabolic activation: with and without metabolic activation

Result: negative

GLP: no

Remarks: Information given is based on data obtained from

similar substances.

Germ cell mutagenicity -

Assessment

In vitro tests did not show mutagenic effects

N-1-naphthylaniline:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Test Type: Chinese Hamster Ovary (CHO)

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Mouse (male)

Result: negative

Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects., Tests on

bacterial or mammalian cell cultures did not show mutagenic

effects.





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

Carcinogenicity

Components:

N-1-naphthylaniline:

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

IARC Group 2A: Probably carcinogenic to humans

sodium nitrite 7632-00-0

(nitrite (ingested) under conditions that result in endogenous nitrosation)

**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

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Effects on foetal develop-

ment

Application Route: Oral

Method: OECD Test Guideline 421

Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses, Not

classified GLP: yes

pentaerythritol:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

STOT - repeated exposure

**Components:** 

molybdenum disulphide:

Exposure routes : Oral

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

pentaerythritol:

Exposure routes : Oral

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

N-1-naphthylaniline:

Exposure routes : Oral

Target Organs : Liver, Kidney

Assessment : May cause damage to organs through prolonged or repeated





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

exposure.

**Aspiration toxicity** 

**Product:** 

No aspiration toxicity classification

**Further information** 

Product:

Remarks : No data is available on the product itself.

**SECTION 12. ECOLOGICAL INFORMATION** 

**Ecotoxicity** 

**Product:** 

Toxicity to fish

Remarks: No data available

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 71 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EbC50 (Desmodesmus subspicatus (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : No toxicity at the limit of solubility, This product has no known

ecotoxicological effects.

pentaerythritol:

Toxicity to fish : LC50 (Oryzias latipes (Orange-red killifish)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 600 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (algae): > 1,000 mg/l





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chron-

NOEC (Daphnia magna (Water flea)): > 1,000 mg/l End point: Survival

ic toxicity)

Exposure time: 21 d

io toxioity)

N-1-naphthylaniline:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.44 mg/l

Exposure time: 96 h Test Type: semi-static test Analytical monitoring: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.68 mg/l

Exposure time: 48 h Test Type: semi-static test Analytical monitoring: yes

M-Factor (Acute aquatic tox-

icity)

1

Toxicity to daphnia and other : aquatic invertebrates (Chron-

aquatic invertebrates (

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.02 mg/l

Exposure time: 21 d Analytical monitoring: yes

M-Factor (Chronic aquatic

toxicity)

1

Toxicity to microorganisms : EC50 (Protozoa): 2 mg/l

Exposure time: 48 h

EC50 (Bacteria): > 10,000 mg/l

Exposure time: 3 h

Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability : Result: According to the results of tests of biodegradability this

product is not readily biodegradable.

Method: CO2 Evolution Test

pentaerythritol:

Biodegradability : aerobic

Inoculum: activated sludge

Result: According to the results of tests of biodegradability this

product is not readily biodegradable.

Biodegradation: 0 %





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

Exposure time: 14 d

N-1-naphthylaniline:

Biodegradability : aerobic

Inoculum: activated sludge Concentration: 100 mg/l

Result: According to the results of tests of biodegradability this

product is not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301

GLP: yes

**Bioaccumulative potential** 

**Product:** 

Bioaccumulation : Remarks: No data available

**Components:** 

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Partition coefficient: n-

octanol/water

log Pow: > 7

pentaerythritol:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 0.3 - 0.6

Exposure time: 42 d Temperature: 68 °F / 20 °C Concentration: 10 mg/l

Partition coefficient: n-

octanol/water

log Pow: -1.69

N-1-naphthylaniline:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 427 - 2,730

Exposure time: 56 d
Temperature: 77 °F / 25 °C
Concentration: 0.1 mg/l

Partition coefficient: n-

octanol/water

log Pow: 4.28

Mobility in soil

**Product:** 

Mobility : Remarks: No data available





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

#### Other adverse effects

**Product:** 

Results of PBT and vPvB

assessment

This mixture contains no substance considered to be persis-

tent, bioaccumulating and toxic (PBT).

Additional ecological infor-

mation

There is no data available for this product.

Harmful to aquatic life with long lasting effects.

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

**Disposal methods** 

Waste from residues : In accordance with local and national regulations.

#### **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

### **SECTION 15. REGULATORY INFORMATION**

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

# **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
sodium nitrite	7632-00-0	100	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

### 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

Components	CAS-No.	Component TPQ (lbs)
SADA 311/312 Hazarde	Pospiratory or skip s	concitication

SARA 311/312 Hazards : Respiratory or skin sensitisation

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

sodium nitrite 7632-00-0 1.375 %

### California Prop. 65

WARNING: This product can expose you to chemicals including aniline, 1-naphthylamine, 2-naphthylamine, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

#### **California List of Hazardous Substances**

molybdenum disulphide 1317-33-5 Graphite 7782-42-5 sodium nitrite 7632-00-0

**California Permissible Exposure Limits for Chemical Contaminants** 

molybdenum disulphide 1317-33-5 Graphite 7782-42-5 pentaerythritol 115-77-5

California Regulated Carcinogens

Quartz (SiO2) 14808-60-7

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

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

DSL : This product contains the following components listed on the

Canadian NDSL. All other components are on the Canadian

DSL.

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

NZIoC : Not in compliance with the inventory

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

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

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

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

TCSI : Not in compliance with the inventory

US.TSCA : All substances listed as active on the TSCA inventory





Version Revision Date: SDS Number: Date of last issue: 09/12/2019
1.8 06/26/2020 400000001766 Date of first issue: 12/05/2014

#### **TSCA list**

The following substance(s) is/are subject to a Significant New Use Rule: sodium nitrite 7632-00-0

The following substance(s) is/are subject to TSCA 12(b) export notification requirements: sodium nitrite 7632-00-0

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

#### Other Emergency Phone Number

Latin America:	Brazil	+55 11 3197 5891
	All other countries	+44 (0) 1235 239 670
Mexico:		+52 55 5004 8763

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -

1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Min-

eral Dusts

ACGIH / TWA : 8-hour, time-weighted average ACGIH / TWA : Time-Weighted Average Limit (TWA)

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-3 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; 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;





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 09/12/2019

 1.8
 06/26/2020
 400000001766
 Date of first issue: 12/05/2014

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 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; 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

Revision Date : 06/26/2020

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