Nano Extreme Duty NXD Grease

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024.
Issue date: 1/17/2022 Revision date: 3/5/2025 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Nano Extreme Duty NXD Grease
Product Code	:	NDT14MG, NDTCS35NXD, NDTCS120NXD, NDTCS400NXD
Tariff Code	:	2710.19.4000

1.2. Recommended use and restrictions on use

Recommended use	:	Lubricating grease. Consumer/Industrial Use.

1.3. Supplier

Manufacturer
Nano Pro MT
7427 Matthews-Mint Hill Road, Suite 201
Charlotte, NC 28227 - USA
T (877) 626-6776 or (704) 954-8290

1.4. Emergency telephone number

Emergency number	:	CHEMTREC (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
Reproductive toxicity, Category 2	Suspected of damaging fertility or the unborn child.

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : Causes serious eye irritation
Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) : If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
If exposed or concerned: 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 eye irritation persists: Get medical advice or attention.
Store locked up.

Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Calcium carbonate	CAS-No.: 471-34-1	2.5 - 5
Benzenesulfonic acid, dodecyl-, calcium salt	CAS-No.: 26264-06-2	< 3
Antimony tris (Dialkyldithiocarbamate)	CAS-No.: Trade Secret	< 2.5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	CAS-No.: 68411-46-1	0.1 - 1

Comments : *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : Suspected of damaging fertility or the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2), dry chemical powder, foam.
Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Irritating vapors.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.
Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only in well ventilated areas. Spilled material may present a slipping hazard.
Hygiene measures : Wash contaminated clothing before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Store locked up.
Storage temperature : < 45 °C / < 113 °F

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Nano Extreme Duty NXD Grease	
NIOSH IDLH TWA	10 mg/m³ total dust
NIOSH IDLH TWA	5 mg/m³ respirable dust

Calcium carbonate (471-34-1)	
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

No additional information available

Antimony tris (Dialkyldithiocarbamate) (Trade Secret)

No additional information available

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves. Wear protective nitrile rubber gloves Thickness ≥ 0.38 mm - breakthrough time >480 minutes. Thickness 0.1 mm - splash protection.

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Smooth. Semi-solid.

Color	:	No data available
Odor	:	No data available
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 150 °C / > 302 °F
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Not flammable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Density	:	< 1000 kg/m³ @ 25 °C / 77 °F
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Irritating vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified

Acute toxicity (inhalation) : Not classified

Calcium carbonate (471-34-1)	
LD50 oral rat	6450 mg/kg (Source: NLM_CIP)
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
LC50 inhalation rat	> 3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
LD50 oral rat	1086 – 1980 mg/kg (Source: NZ_CCID)
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LC50 inhalation rat	0.31 mg/l air Animal: rat, Animal sex: male, Remarks on results: other:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
LD50 oral rat	> 5000 mg/kg (Source: EPA_HPV)
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)

Skin corrosion/irritation : Not classified

Calcium carbonate (471-34-1)	
pH	8 – 9 (aqueous solution)

Serious eye damage/irritation : Causes serious eye irritation.

Calcium carbonate (471-34-1)	
pH	8 – 9 (aqueous solution)

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging fertility or the unborn child.
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Calcium carbonate (471-34-1)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation,rat,dust/mist/fume,90 days)	≥ 0.212 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Viscosity, kinematic	352.7 mm²/s Temp.: '40°C' Parameter: 'kinematic viscosity (in mm²/s)'

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms : Suspected of damaging fertility or the unborn child.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Calcium carbonate (471-34-1)	
EC50 72h - Algae [1]	> 14 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
LC50 - Fish [1]	10.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 96h - Algae [1]	2736 mg/l Test organisms (species): other:
NOEC (chronic)	0.253 mg/l Test organisms (species): other: Duration: '30 d'
NOEC chronic fish	0.23 mg/l Test organisms (species): other: Duration: '30 d'

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Danio rerio [static] Source: ECHA)
EC50 - Crustacea [1]	51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

Nano Extreme Duty NXD Grease	
Persistence and degradability	Not established.

Calcium carbonate (471-34-1)	
Persistence and degradability	Rapidly degradable

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
Persistence and degradability	Rapidly degradable

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Persistence and degradability	Rapidly degradable

Antimony tris (Dialkyldithiocarbamate) (Trade Secret)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Nano Extreme Duty NXD Grease	
Bioaccumulative potential	Not established.

Calcium carbonate (471-34-1)	
BCF - Fish [1]	(no bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

UN-No.(DOT) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
CERCLA RQ	1000 lb

15.2. International regulations

No additional information available

15.3. US State regulations

WARNING: This product can expose you to chemicals including Naphthalene, which is known to the State of California to cause cancer, and n-Hexane, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

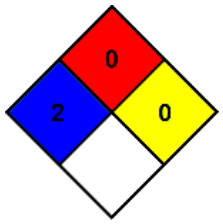
Component	State or local regulations
Benzenesulfonic acid, dodecyl-, calcium salt(26264-06-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024.

Issue date : 1/17/2022
Revision date : 3/5/2025
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Indication of changes:
SDS update . GHS classification. State Right to Know (Section 15 updated)

Safety Data Sheet (SDS), USA - Nexreg 2023

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.