

B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Misty Biodet ND64

EPA ID Number: 1839-169-10807

Material number : 00000000001001939

Manufacturer or supplier's details

Company : Amrep, Inc.

Address : 990 Industrial Park Drive

Marietta, GA 30062

Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation : CHEMTREC: 800-424-9300 - All Calls Recorded.

Emergency In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Cleaner

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid	
Colour	light yellow	
Odour	characteristic	

GHS Classification

Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 2
Skin corrosion : Category 1B
Serious eye damage : Category 1
Specific target organ toxicity - : Category 2

single exposure

.

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.



Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

H371 May cause damage to organs.

Prevention: Precautionary statements

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection. P284 Wear respiratory protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT

induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air

and keep comfortable for breathing. Immediately call a

POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

Disposal:

P501 Dispose of contents/container in accordance with local

regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	>= 1 - < 3
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	32426-11-2	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.



Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

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 skin irritation persists, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible

tissue damage and blindness.

If in eyes, rinse with water for 15 minutes.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Keep respiratory tract clear. Do NOT induce vomiting.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed

Effects are immediate and delayed.

Symptoms may include blistering, irritation, burns, and pain. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness,

paralysis, and convulsions.

Acute specific target organ toxicity effects will differ depending on mode of exposure (oral, dermal, and inhalation), the organs and systems affected, and any preexisting medical conditions. Symptoms may include respiratory difficulty, abdominal pain, headache, dizziness, drowsiness, vomiting, central nervous system depression, blurred vision, seizures,

and unconsciousness - potentially life threatening.

Effects are dependent on exposure (dose, concentration,

contact time).

Harmful if swallowed.

Causes severe skin burns and eye damage.

Fatal if inhaled.

May cause damage to organs.

Review section 2 of SDS to see all potential hazards.

Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

Foam

Carbon dioxide (CO2)



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Dry chemical

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 (CO2) Carbon monoxide

Nitrogen oxides (NOx)

Smoke

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

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.

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 safe handling : Do not breathe vapours or spray mist.

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

Smoking, eating and drinking should be prohibited in the

application area.

To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Electrical installations / working materials must comply with

the technological safety standards.

Observe label precautions.



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory

equipment.

Hand protection

Material : Protective gloves

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

Wear face-shield and protective suit for abnormal processing

problems.

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 : liquid

Colour : light yellow
Odour : characteristic
Odour Threshold : No data available

pH : 5-7

Melting point/freezing point : No data available

Boiling point : 100 °C

Flash point

No data available

Evaporation rate : No data available



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Density : 1.003 g/cm3

Solubility(ies)

Water solubility : completely miscible
Partition coefficient: n- : No data available

octanol/water

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No decomposition if stored and applied as directed.

Conditions to avoid : Heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition

products

: Carbon oxides

Nitrogen oxides (NOx)

Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : Effects are immediate and delayed.

Symptoms may include blistering, irritation, burns, and pain. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness,

paralysis, and convulsions.

Acute specific target organ toxicity effects will differ depending on mode of exposure (oral, dermal, and inhalation), the organs and systems affected, and any preexisting medical



Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

conditions. Symptoms may include respiratory difficulty, abdominal pain, headache, dizziness, drowsiness, vomiting, central nervous system depression, blurred vision, seizures,

and unconsciousness - potentially life threatening.

Effects are dependent on exposure (dose, concentration,

contact time).

Carcinogenicity:

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.

ACGIH Confirmed animal carcinogen with unknown relevance to

humans

ethanol 64-17-5

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

Acute toxicity

NTP

Product:

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

Method: Third Party Data - Actual or Inferred

Acute inhalation toxicity : LC50 Rat: > 0.5 - < 2.0 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: Third Party Data - Actual or Inferred

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

Method: Calculation method

Components:

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Acute oral toxicity : LD50 Rat: 305 mg/kg

Method: Third Party Data - Actual or Inferred

Acute inhalation toxicity : LC50 Rat: 0.054 - 0.51 mg/l

Test atmosphere: dust/mist

Method: Third Party Data - Actual or Inferred

Acute dermal toxicity : LD50 Rat: 930 mg/kg

Method: Third Party Data - Actual or Inferred

Skin corrosion/irritation

Product:

Classification: Causes burns.

Method: Third Party Data - Actual or Inferred



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

Product:

Assessment: May cause damage to organs. Remarks: Third Party Data - Actual or Inferred

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to daphnia and

other aquatic invertebrates Remarks: Toxic to aquatic organisms.

Persistence and degradability

No data available

Bioaccumulative potential



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Product:

Partition coefficient: n-

octanol/water

: Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

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

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Dispose of in accordance with local regulations.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Provincial Environmental control agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for

guidance.

Contaminated packaging : Empty remaining contents.

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

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):

UN1760, CORROSIVE LIQUID, N.O.S., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Transportation Regulation: IATA (Cargo Air):

UN1760, Corrosive liquid, n.o.s., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: IATA (Passenger Air):

UN1760, Corrosive liquid, n.o.s., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: TDG (Canada):

UN1760, CORROSIVE LIQUID, N.O.S., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III - Limited quantity

Transportation Notes

This liquid product and any leakage of this product, does not pose a mist or aerosol inhalation hazard during transportation. The workplace GHS inhalation hazard classification (Section 2 of SDS) does not correlate to a transportation inhalation hazard, therefore is not applicable.

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Pesticide Labeling Information Required Under U.S. FIFRA Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: DANGER

Corrosive - causes irreversible eye damage.

Causes skin burns.

May be fatal if absorbed through skin.

Harmful if swallowed.

TSCA list : No substances are subject to a Significant New Use Rule.

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

requirements.

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity



Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

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

SARA 311/312 Hazards : Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

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.

California Prop. 65



WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

DSL All components of this product are on the Canadian DSL

TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

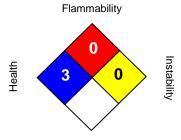
SECTION 16. OTHER INFORMATION



Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Further information

NFPA:



Special hazard.

HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms







Signal word Hazard statements Danger:

Harmful if swallowed. Causes severe skin burns and eye damage. Fatal if inhaled. May

cause damage to organs.

Precautionary statements

Prevention: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wear respiratory protection.

Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse

mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF exposed or concerned: Call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed. **Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	2.0
Revision Date:	04/20/2018
Print Date:	05/31/2018

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 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. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®,Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®,



B00272 MST BIODET ND64 4/1GLL

Version 2.0 Revision Date 04/20/2018 Print Date 05/31/2018

Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®,Rexodan®, Mykal™, and a number of private labeled brands.